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THE PARTED.

THOUGH nothing can be more honourable than opulence acquired by industry, it often happens in a large manufacturing town, that individuals spring from a penurious origin to the possession of enormous wealth, without acquiring those generous habits of thinking and feeling which alone can render affluence respectable. Pinched and scorned in their early days, they contract a notion that the opposite of all evil is in the mere exemption from poverty, that all men who do not make money are either imbecile or dissolute, and that they are in no danger of offending against any of the rules of life, if they only keep their gold from waste.

Old James Bisset was a person of this kind, who flourished a considerable number of years ago in Glasa city which, though containing many men who have alike gained fortunes by honourable means, and enjoyed them in a creditable manner, must necessarily be the habitation of some others, characterised in the way we have described. The individual we are alluding to had originally been a small shopkeeper. Lucky turns in trade, joined to indefatigable industry, ultimately enabled him to become the principal shareholder and director of a bank, in which line of business he realised a fortune which was literally beyond calculation. Day after day, with the most pertinacious regularity, did he assume his seat in a small screened space in the telling-room, where he was ready, without appearing publicly, to be consulted on all occa of difficulty. With what a knowing air would he handle any odd kind of bill that was presented to him ! How keenly, and yet at the same time coldly, would he inspect signatures which he was not very much in the habit of seeing! Were the presentee a somewhat embarrassed trader, struggling, by means of bills, to avert the destruction which they only rendered the more certain and deadly, James was sure to have heard some inkling (to use one of his own phrases) of what was going forward, and the answer accordingly was given, with a polite smirk, enough to sink the victim into the earth—"It is not just convenient." Were the applicant a young man recently entered into business, and not very well off for capital, then, whatever might be his personal merit, whatever his industry, whatever his prospects in trade, it was— "We do not know the parties." The first time I saw Bisset was in his own bank. He happened to come forth from his den, to say something to a clerk, and I took him fully into my eye as he crossed the floor. There he was, with his neat person, marked with a dash of the antique his substantial west of England black stand of clothes, small silver buckles at the knees, clear black shoes, and white scanty hair-the very beau-ideal of a close careful man, of rigid uprightner and propriety in all things, but_no feeling. If, thought I, this man hath a daughter, how difficult to get a man good enough for her! If he have a son, how impossible for that son to "be every thing that his fa-ther could desire!" In this man's estimation, the world must be a scene of almost unmixed unworthi-Not one man in five hundred will be any thing in his eyes. If the whole of mankind were worth a plum each, it would be paradise once more. But there being few so very good, it must be like the doomed city, with not nearly a sufficient exception of respectability to save it from general contempt. How, thought I, would this man act if he had a child in the situation of Belvidera, or Juliet, or Ophelia !- for, strange as it may seem, even this hardened mass of feelingless clay might quite well, in the course of nature, be the father of some being, matching, in soft-

There were, as I afterwards learned, some circum es in the family of Mr Bisset, which had tried his heart in a way not far different from what I was supposing-but found it wanting. He had but one daughter, Anne, who had married a person of her own rank some years before, when her father was as yet but a rising and struggling man. This person, wh name was Inglis, prosecuted business for years with success, but eventually, owing to the rise in his style of living, which the ambition of his wife demanded, in order to keep pace with her father's advancing greatness, while that father would never render his son-inlaw the least assistance, he became-to use a well-understood phrase of delicacy—unfortunate. The ruin of the son-in-law produced hardly a changed muscle in old Bisset. He only remarked, one day, that he had never had any very good opinion of that frequent advertising practised by Mr Inglis, and had often told him so. but without effect. "And then his own extravagance," said the old gentleman, with a generous forbearance of all further explanation. This coldness, however, would not do. Bisset soon found, that, if Inglis could not support his wife and his children, he would be obliged to support his daughter and his grandchildren; and he therefore allowed himself the luxury, and claimed from the world the merit, of doing his son-in-law the great kindness of setting him once more up in business. His advances, however, were in such a form as to give him a complete dominion over Inglis, so long as they were not repaida power he exercised to its fullest extent, in pestilent and querulous interferences in every movement made by his son-in-law. The consequence was, that the young man lost heart, and really became guilty of the very errors which Bisset wished him to avoid. His business, which at first showed some symptoms of revival, began to decline; ordinary obligations were answered with some difficulty; and application was made for further advances to Bisset, who, so far from granting them, was only incited to look the more sharply after what he had already given. Finally, to gain some paltry preferences upon the estate of his son-in-law, he forced him a second time into the pit of ruin, from which, of course, a second redemption was not to be hoped for. "Far better," said Bisset, "to support my daughter and her family by a direct outlay, than vainly endeavour, at an infinitely greater cost, to keep her up through the means of that rascally dog of a husband."

Inglis , who was in reality a man of good dispositions, though of soft and rather indolent character, was never able, after this event, to hold his face up in the world. Mortified more by the cruelty of his wealthy relative than even by his disagreeable position in mercantile society, he sunk for a time into dissipated habits, and was accordingly given up for lost by all his former friends. The world was at the same time partly aware of the severity with which he had been treated, and seemed fully disposed to pity and befriend him; but, as it invariably happens, any good that might have arisen from this state of public feeling, was neutralized by the impossibility of relying upon the conduct of the man himself-for how can any employer, or any one who has credit to dispense, depend upon the behaviour of a tippler ?-a man who may to-day contract obligations with the full and conscientious design of fulfilling them honourably, but ose best resolutions may be dissipated to-morrow before the temptation of that meanest of all indulgences, a dram! Thus Inglis went down, and down, and down, without the least power, apparently, to avert his own decline. His father-in-law had never seen him since the period of his second failure. He pretended that he could not endure to look upon a

man who had injured him so much, and whose conduct was so far from reputable. His daughter he proposed to take home into his own house, along with her children, amounting to four in number, but only on the strict understanding that she was never again to meet her husband.

Mrs Inglis was one of a somewhat uncommon class of women, but who, nevertheless, *ure* a class—cold, tame, and self-indulgent; capable of discharging carefully the most of the minor duties of life, and even, perhaps, notable for good general behaviour, but who are totally unfit, when called upon, to act upon high and self-denying principles. Her husband she liked well enough; but then she liked her father too. She would have been well content to continue living with her husband; but then his circumstances were not such that she could live with him. And the children -what was she to do with them? Ought she not rather to leave her husband, in order to ensure their support and comfort, than stay with him, and see them subjected to all conceivable hardships? In short, she found far more than the requisite excuse to commit the great sin of parting with her husband on the terms proposed by her father. She went to the enjoyment of every luxury that tongue could name or heart desire, to bring up her children like the sons of princes, and to be the fondled pet of a doating father, who could never see wrong in either her sayings or her doings; while he, whom she had sworn never to part from, for any thing that the world could either give or take away-the father, too, of those children-the being with whom she had once seemed to share an absolute community of existence, was shred away from her like a noxious weed, and left to find his own solitary and cheerless way through the world, with no hope except in the correcting vengeance of that Deity whose laws she had so shamelessly violated.

Inglis now became a thorough prey to fortune. For while, but only a little while, after their parting, was worked upon by his written solid his wife to send him small sums of money, which she had saved off the allowance made to her by her father; and she even ventured on one occasion, at the risk of being turned out of her splendid house, to pay a stolen visit to her unhappy partner, at a time when he was suposed to be dangerously ill. Soon, however, even this intercourse ceased. Exposed every day to hear her father's sentiments respecting Inglis, she insensibly came hardened towards him, looking upon herself, and her children, and her father, as forming a particular system by themselves—one of great magnificence and unimpeachable virtue and propriety—and her husband as a poor and disreputable object, which was quite alien to the former. Then came a time when the sight of her shabby husband would occasionally cross her sight on the streets, to wither all the enjoyments amidst which she lived, and she would shrink away from the accusing spectacle, like a murderer from the sight of blood—thinking that every eye in the surrounding crowds was intent in estimating the contrast between her own luxurious condition and the abject misery of one who was still, let her do what she uld, a part of herself. Then came a time when her children, growing up to observation of the world, would ask if they also, as well as their companions, had a father?—and where was he?—and would they ever see him ?-and would he bring them home playthings, like other fathers whom they named, were long from home ?-questions that, like lashes. brought each away a piece of the very flesh along with it, though rather by the humiliation they inflicted, than any feeling of remorse. One day, the eldest girl, wh o, contrary to custom, had been permitted to ander into the town, came home quite breathless

ose creatures of the imagination No. 28, Vol., II.

s, and affection, and sensibility, all or any one of

m is nwith surprise and haste, saying that she had been seized on the street and hurried into an alley by a horrid-looking man, who called himself her father, and insisted on kissing her several times, which, when she resisted, with cries that alarmed some people who were passing, he set her down hurriedly, and ran away out of sight; leaving her, she said, with her face all covered with his tears. Still greater care was taken thereafter to prevent the children from wandering out of sight; but not long after, as the gay and gorgeous lady was stopping in her carriage at a shop in Argyle Street, with her four beautifully dressed children around her, Catherine suddenly started up, and, pointing to some one on the pavement, cried, "There, mamma! there is the bad man who called himself my father!" And, on her involuntarily turning to the object thus indi-

is the bad man who called himself my father !" And, on her involuntarily turning to the object thus indicated, her eyes were met by another pair, so wild, so mournful, and so full of painful meanings, that she had hardly breath to ank the coachman to drive on.

A time at length came when this very child was seized with what appeared a mortal illness. Both mother and grandfather were watching over her in a state of inexpressible grief, and every moment was expected to be her last. At the height of their sorrow, a hurried but subdued knocking was heard at the outer door, and presently after there arose the sound of a scuffle between the servant and some one who wished to make a forcible entrance. "Shall I not see my own child?" cried a hoarse and broken voice, wished to make a forcible entrance. "Shall I not see my own child?" cried a hoarse and broken voice, which, all altered as it was, they knew too truly to be that of the unfortunate Inglis, and presently after he burst wildly into their presence. The lady fainted, and, while Bisset stood trembling with rage in the middle of the floor, the desperate man approached the bed of the dying infant, whom he took tenderly in his arms, and kissed with the most affectionate fervour. "What right—by what—what right," cried Bisset, almost choking with passion, "do you make this intrusion? Sir, I tell you, you have no right to be here." And he stopped from absolute inability to command his voice. "I have a right to be here," replied Inglis, after having carefully laid down the child. "Your house, perhaps, and yourself, and these staring servants there, are not in any way under my control; but to this child, sir, I have a right. She is mine, by the laws of both God and man, and I could this moment take her for ever from your sight, even were you to see her gasp her last in my arms before we reached the door. You know this, sir; and, cruel and base as you are, you cannot dispute it. Nor that lady there," he added with a hitter anoer, "when own child?" cried a hoarse and broken voice. and base as you are, you cannot dispute it. Nor that lady there," he added, with a bitter aneer, "when she revives from her amiable trepidation, could she deny it either."

In the name of God, then," said the miser, awed by the very wrath of his wronged son-in-law, "what do you mean to do? Your violence, however we may you mean to do? I tour violence, it it, must be most distressing to this dying inno-it, and may even prove the immediate cause of her with. Would it not be better that you quietly retired, now that you have seen what you wanted to

The unhappy man could make no answer. His eye was fixed in silence upon his child, whose countenance was fixed in silence upon his child, whose countenance at this moment began to exhibit the unequivocal symp-toms of coming dissolution. "My Catherine—my Caent clasped a lifeless ter, rendered unrehe cried, and next mor ourse. A few minutes thereafter, rendered unre-sisting apparently by his intense grief, he permitted himself to be led peaceably to the door, and gave the afflicted house no more trouble.

It is often of advantage to a man who has entered upon evil course.

upon evil courses, that something should occur to give an agitation to his whole system of feeling. The shock of some tremendous grief, like a thunder-storm in the elements, seems to clear the mental atmosphere, in the elements, seems to clear the mental atmosphere, and it him for once more commencing, if his passions will permit, the career of virtue. Inglis, apparently reformed, now proceeded to Edinburgh, where he had no evil reputation to contend with, and, on the strength of a small sum communicated to him, in a letter of partial kindness, by his wife, opened a school for such branches of education as he found himself qualified to teach. The attempt, though unprosperous at first, was beginning to be attended with some small share of success—his manners being, at the same time, observed beginning to be attended with some small share of suc-cess—his manners being, at the same time, observed to continue quite irreproachable—when he was seized by a severe chronic disease, which disabled him for a whole winter, and left him, at the return of spring, without a penny in his pocket, or a pupil in his acade-my. His life, after this disaster, was one unbroken my. His life, after this disaster, was one unoroxen scene of distresses, pecuniary and otherwise, and, but for the slender succour which was occasionally rendered to him by the good will, rather than the ability, of his poor neighbours, he must have died of hunger. The unfortunate always herd with the unfortunate; the unfortunate are to the unfortunate almost a sole ge and shelter; the unfortunate alone can judg for the unfortunate; while no oth perly be to them either a companion, or a benefactor, or a judge. Inglis, while deserted by a wife, the crumbs of whose luxury would have been to him an ample furnishing, and overlooked by all men who were once his equals, found in those who were nearly as destitute as himself, the only friendship he ever excessioned the only true represents for his condition. perienced, the only true sympathy for his condition, the only alms that any one would give. Blessings, double bleasings, be on the generous poor! it happened in the revolutions of life, that an intimate friend of the writer of this narrative became acquainted with the story and circumstances of the

unfortunate Inglis, and was able to do something for the alleviation of his many troubles. He found him to be, upon the whole, a man of an inoffensive character, of some acuteness of mind, and more than the averof some acuteness of mind, and more than the average of information, but outworn with past excesses, and the attrition of a perpetual grief. He spoke little of his misfortunes or of his family; but one day, being rather more depressed than usual, and the cause being asked, he said he had just heard that his second son, whom he had not seen for many years, was about to come to the capital, for the purpose of studying for the bar, and being certain that the young man would be there without ever inquiring for his father, or perhaps being aware of his existence, he had experienced more than usual distress of mind from the consideration of his extraordinary circumstances. My friend could not help acknowledging, that, even after enduring so much, a new circumstance, involving so during so much, a new circumstance, involving so unnatural an association of ideas, might well be ex-pected to give him additional uneasiness.

unnatural an association of ideas, might well be ex-pected to give him additional uneasiness.

This ill-used man at length died in a humble lodg-ing, where he existed solely upon charity; and his wife, being written to on the occasion, replied by the simple transmission of a sum of money sufficient to simple transmission of a sum of money sufficient to bury him and discharge his little debts. No notice was taken of the event by his family. His widow wore her usual gay dresses; his children were not even informed of their loss; his name was "never heard."

God, however, in due time, seemed (as far as mortals might be permitted to interpret his decrees) to manifest his sense of this unholy violation of one of his earliest and most solemn injunctions. The children, in whom the mother and grandfather took so much delight, were one after another snatched away by the various diseases of childhood and youth, till not one was left to console their age, or inherit the wealth which had so absurdly been hoarded for them. The loss, it may well be supposed, was mourned with tears of double bitterness, for it was impossible to take such a calamity as an occurrence altogether within the ordinary course of nature. The lady was so much exhausted by her exertions for her children, that she took ill immediately after the death of the last, and, mental anguish aiding in the progress of her malady, she did not live many weeks. Bisset, who apparently had never thought it possible that he could be pre-God, however, in due time, seemed (as far as mortook ill immediately after the death of the last, and, mental anguish aiding in the progress of her malady, she did not live many weeks. Bisset, who apparently had never thought it possible that he could be predeceased by his daughter and so many blooming children, was, by this event, struck with a kind and degree of grief altogether foreign to his nature. He yet survives—but only as a spectacle to excite the pity of those who know him. Palsied, fatuous, and blind, he is nothing but a living block; nor can all his gold, immense as it is in amount, reflect one consoling ray on his decline. His wealth, which, if well used, might have spared him the life of the only being he ever loved, and kept other hearts besides from breaking, will speedily be dispersed among a number of distant relatives, who neither care for its present owner, nor will be advantaged, perhaps, by its possession.

THE YOUNG CHEMIST .- No. I.

WE have not hitherto introduced much of chemistry into our columns, and perhaps many of our readers will be frightened at the very outset with the abstruse word, not knowing the real meaning of the term. The fact is, however, there is none of the sciences the operations of which are more familiar to us in every-day life than that of chemistry. We are all chemists more or less, though we may not be conscious of it. The cook, the baker, the brewer, the artizan of almost every description, daily and hourly are performing some nice and intricate chemical experiments of some kind or other; and perhaps no science has contributed in modern times so much to the comfort and convenience of man, or served, by the full light which it has shed upon familiar objects, to banish vague superstition, or correct the false notions which we had formed of things. Perhaps, too, there is no species of science better fitted for awakening the youthful mind to thought, and for training it to activity and precision. We found it so with ourselves, and it happened thus :-

In the dawn of our college life, we found ourselves like nine-tenths of our companions, idle, listless, and ignorant of every thing around us, past, present, and to come, with the exception of some crude notions about the Greeks and Romans, gleaned from the repeated connings of our daily school tasks. Our mind seemed active, too, poking about, and seeking for exertion; but it had nothing with which to busy itself; no end, or aim, or palpable materials to work upon: perhaps it would lose whole hours in a wild reverie of the imagination, or expend its energies in the grotesque phantasmagoria of a fairy tale. In this state, we by mere accident accompanied a senior student to a che mical lecture. Immediately, as if by magic, a new spark of fire was elicited within us; we were introduced into a new region of existence; that which the eager mind had sought for, it found, and henceforth,

for many a day, whether we waked or slept, or ate or drank, we lived a chemist : our little room was forthwith converted into a laboratory; every shelf and cranny was stuffed with phials and gallypots; glass tubes, blowpipes, and air-troughs, occupied floor and table; all boyish follies and triflings were laid aside. every spare hour was devoted to deep, but delightful oul-abstracting study; and hence the young chemist led the life of a genuire philosopher. Of all pleasures, perhaps the greatest and most intoxicating is the taste of the first-fruits plucked from the tree of science. It undoubtedly renders even the most modest youth at first ridiculously inflated by the shallow draughts of a little knowledge; but as he drinks deeper, all this passes off, and he sinks into the sober philosopher again. It was usual for the young chemist in those days to lecture his brothers and sisters eated round the breakfast or dinner table-to show them that table-salt was not the vulgar thing they had all their lives supposed, but that it was a muriate of la, or a mixture of muriatic acid and the common alkali soda. He demonstrated to them, too, that sugar was not a simple substance, and, under all its changes, characterised as the sweetener of tea or coffee, but that it could be separated into three distinct partscarbon, or a substance exactly the same as burnt wood, and two airs, hydrogen and oxygen, which were as transparent and invisible as the air around us that we breathe. He showed that what we termed that we breathe. He showed that what we termed cold, was nothing, in reality a mere empty name; and that bodies were cold just because they did not possess the principle of heat; that when we touched the cold marble slab, it was not the cold coming to our fingers which we felt, but the heat running from our body by the fingers, and passing into the slab. In short, whether the family circle ate or drank, were cold or warm, wet or dry, the young chemist could give them a philosophical reason for all. It is true, mamma and the elder sisters of the group were sometimes terribly alarmed at strange bursts of flame, suffocating smells, and repeated loud explosions that not unfrequently issued from the room of the chemist; and stained clothes and disfigured linen were circumstances not unfrequently of regret and vexation;

that not unfrequently issued from the room of the chemist; and stained clothes and disfigured linen were circumstances not unfrequently of regret and vexation; yet, on the whole, they used to declare that they would much rather have a dozen of young chemists than half that number of idle, mischievous, and stupid or unintelligent boys. We believe the young chemist was, on the whole, a source of secret pride, and esteemed a source of infinite amusement, and the vehicle of no small rational instruction to his happy family group. But we have not yet exactly told what chemistry is. All substances on the face of the earth have certain properties. They are either sweet, or sour, or bitter, or they have no taste at all: they are hard and solid as a piece of metal or stone, or they are fluid like water, or they are light and transparent like air. Many substances, too, when you put them together, mix instantly and form one; but many, on the contrary, will not so mix. Thus, if you drop a lump of sugar into a glass of water, it immediately dissolves, and you have a thin sweet liquid; but if you drop a pebble into this water, you have still tasteless water, and an undissolved pebble at the bottom. Again, if you take a glass of lemon juice, and about a teaspoonful of common soda in powder, and mix them together, you have a violent bubbling up, or effervescence, while the whole of the soda is dissolved in the lemon juice; but if you examine and taste this liquid now, you will find that it has neither the sour taste of the emon, nor the peculiar taste of the soda, but a distinct sharp taste, different from either: these two you will find that it has neither the sour taste of the lemon, nor the peculiar taste of the soda, but a distinct sharp taste, different from either: these two substances have combined, and formed a third, a salt, having peculiar properties of its own. In this way you may go through every substance in nature; and inquiries of this kind into the mixture or combination of substances into their properties of dissolving or not dissolving in certain fluids, and, in short, every circumstance relating to them and their actions in this way, has been called the science of chemistry. It will thus be seen that it is a wide and interesting field, embracing an acquaintance with every thing around

thus be seen that it is a wide and interesting field, embracing an acquaintance with every thing around us, whether of earth, or water, or air, or the solid and fluid parts of vegetable and animal bodies.

Now, chemists are an active, poring, and indefatigable race, from the very youngest to the oldest of them; and by their labours for the last hundred years (for within this period we may say the great bulk of chemical knowledge has been acquired), it is made manifest, that, however various and innumerable may be the different forms of things around us throughout the world, yet not much more than fifty distinct kinds of matter exist; that is, we have about fifty-four simple substances, by the mixture of which in a variety of the world, yet not much more than fifty distinct kinds of matter exist; that is, we have about fifty-four simple substances, by the mixture of which in a variety of ways, and in different proportions, all salts, and sweets, and sours, all rocks, and gems, and water, and air, and vegetables, and animal bodies, are produced. These substances are called simple, because, having been subjected to all sorts of trials, they cannot be further separated, and may be said to be the essence. be farther separated, and may be said to be the essence or first principles of matter. Thus, if we take a little common salt, and subject it to various operations, we can separate it into two distinct substances, an acid and an alkali, or the common soda; again, by ruixing these two substances, we reproduce common salt. It is evident, then, that it cannot be a simple substance. But if we take a piece of gold, and treat it in all manner of ways, we can never separate it into any thing more simple than just gold; or if we take a little pure sulphur, we can never make it less, or other than pure sulphur. Hence these substances have been termed

phur, we can never make it less, or other than pure sulphur. Hence these substances have been termed simple.

We have, then, about fifty-four of these simple elements in nature; and did they always remain in their simple state, we would have a condition of things very different from what is before us. But this is not the case. Rarely, indeed, are they found separate: they like to join, and intermarry, and keep companionship; and hence proceed daily new shapes and ever-changing variety. The modes in which bodies unite arinnumerable, and the metamorphoses which they undergo are beyond all the changes which have excited the juvenile wonder at a Christmas pantomime. Thus, one would not readily believe that the same substances when mixed in one proportion would form the mild and transparent air of the atmosphere, while the very identical substances under a different mode of mixture constituted the well-known substance aqua fortis, or nitric acid; and yet such is the fact, the substances being oxygen, or vital air, and nitrogen. The circumstance, at first, no doubt, appears incredible, that common river water is composed of two airs, oxygen and hydrogen—the latter so highly inflammable that it bursts into explosion on the first touch of fire. Yet such is the fact, and it can be easily proved; for if a small jet of hydrogen gas or air be set fire to within a jar of oxygen gas, the burning will produce many drops of pure water on the sides of the jar. Moreover, if water be passed drop by drop through a gun barrel heated red-hot in the middle, it will be decomposed, or separated into parts; one part, the hydrogen, will escape at the end of the barrel, and may be set over, if water be passed drop by drop through a gun barrel heated red-hot in the middle, it will be decomposed, or separated into parts; one part, the hydrogen, will escape at the end of the barrel, and may be set fire to; the other part, the oxygen, enters into combination with the heated iron. On examining a rocky mountain, the young chemist has seen his audience stare as he explained to them, that of those rocks perhaps a fourth part, or in some instances nearly a third, was composed of oxygen, or the pure light and transparent air of the atmosphere, or that the limestone mass at their feet could easily be separated into a somewhat heavy air, and pure or quick lime, the volume of the former being so great in proportion, that a piece he could hold in his fingers will contain as much air as would fill a large room. The proof of this, however, is as simple as possible. Take a wine glass half full of water, into which drop another half of muriatic acid; then place into the mixture a small knot of chalk; immediately a copious action takes place, and innumerable bubbles of air mount upwards, which, if collected, would show the volume of the gas as compared to the small ball of chalk. All substances, then, of whatever kind, can exist in three states—the solid, fluid, and the aëriform; and, in fact, all substances on the face of the earth are constantly shifting and changing into chair. All substances, then, of whatever kind, can exist in three states—the solid, fluid, and the aëriform; and, in fact, all substances on the face of the earth are constantly shifting and changing into all these different conditions. The cause of these changes is the great and important agent, heat, called, in the language of chemistry, caloric. Thus water, if it has a small allowance of heat, becomes a solid piece of ice; with a little more heat, it becomes the common fluid water; with a still greater heat transacs into vapour or air. Thus, also, lead is a solid at the usual temperature; if heated to a great degree, it melts into a fluid; if still farther forced by caloric, it rises into a vapour or air. It is the same with every body in existence. And before treating farther of chemical subjects, we must pause to consider something of the laws of heat, and the influence which this agent or substance, or whatever it may be, exercises on this wonderfully constituted globe. We must, in concluding for the present, remark, that, in chemical, as well as all other sciences, certain hard names do occasionally occur, and many circumstances must be mentioned at the first outset, without full explanations of their meanings being given; for it is only as the student advances. must be mentioned at the first outset, without full explanations of their meanings being given; for it is only as the student advances, and his knowledge in-creases, that he can comprehend explanations of those, and of many other minutise of the science. For the sake of joining amusement with instruction, we may often ramble a little as we tread the pleasing field; wet the reader who follows us attentively will always be sure to find method in our ramblings.

I was once in possession of a very fine house-dog, which had formerly belonged to Covent Garden, but, for killing a man accidentally in the dark, was discharged. Pasquin came to my house one Saturday morning, to get "my bones;" but Mrs Bernard and myself were out, to give the servants free dominion with their mops and buckets. The door being open, Pasquin walked in, and intended to enter the parlour; but the dog was lying on the mat before it, who, mistaking the former either for the dustman or a coal-heaver, rose on his hind leax, with a sense of the , rose on his hind legs, with a sense of the criety, and placing his paws to the stranger's ers, actually walked him back to the threshold, shoulders, actually walked him back to the threshold, where he dropped to the ground, and looked him up in the face. The maid was descending the stairs at this instant, and perceived the whole affair. Now, this was not a more extraordinary proof of the goodbreeding of the dog, than the unpleasantness of Pasquin's appearance—here was a gentlemanly dog turning out a dirty one.—Bernard's Retrospections of the Stage.

HISTORY OF THE ASSASSINS

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THE term Assassins has been long familiar in Europe, but little information has been given of the singular sect from which the name was derived. According to M. Von Hammer (a native of Germany, who, from sources purely oriental, has with great labour and research produced the latest and the best work on the nature and organization of this most extraordinary order), they were an order, at once military and religious, like the Templars, and like them, too, subject to the control and guidance of a grand master, who was named the Sheikh-el-Jebel, corruptly rendered, the old man of the mountain, who, from his seat at Alamoot, in the north of Persia, like the general of the Jesuits from Rome, directed the motions of his numerous and devoted subjects, and made the most haughty monarchs tremble at his name. From the work which he has composed on this novel and interesting subject, we shall attempt to give our readers some idea of the organization of the sect, and expose the mighty ills which may be brought on the human race, by the agency of secret associations, in the history of one of the most powerful and destructive which ever existed. In the stormy period which succeeded the death of Mohammed, numerous sects sprang up among the believers of Islamism. One of these, the Mazdekee, professed universal freedom and equality, the indifference of human actions, and the community of goods; and, strange as it may appear, it numbered among its adherents Cobad king of Persia. The imprudence of this monarch cost him his crown, and his son Noosherwan, convinced of the pernicious influence of the sect, endeavoured to eradicate it with fire and sword.

sherwan, convinced of the pernicious influence of the sect, endeavoured to eradicate it with fire and sword. In this attempt he did not completely succeed, and the immoral opinions continued to exist in secret, until an opportunity offered, when they were again publicly promulgated, and Persia became the scene of blood and devastation.

At this period there lived at Ahras, in the south of Persia, a man named Abdallah, who had been edu-cated in the maxims of the ancient religion and policy of Persia, and whose national animosity induced him of Persia, and whose national animosity induced him to attempt the overthrow of the faith and the empire of the victorious Arabs. The only path to ultimate success, he saw, was to undermine them by secret means; and to effect his purpose, he enveloped his design in the veil of mystery, and in imitation of the schools of India and Pythagoras, communicated gradually his doctrines to his disciples. These consisted of a denial of all religion, with the belief that all actions are indifferent, and that neither here nor hereafter will they be rewarded or punished. With the after will they be rewarded or punished. With the greatest zeal, by means of missionaries, he disseminated his opinions, and augmented the number of his disciples, until at length one of them was placed on disciples, until at length one of them was placed on the throne of Egypt, and the new system was esta-blished in Africa. But it contemplated farther tri-umphs, and its missionaries overflowed Asia, in the hope of overturning the throne of the caliphs of Bag-dad. Lodges of men and women were formed in different places, and the principles of the sect were taught in regular succession, according to the pro-gress made by the members, or the confidence placed in their discretion. To believe nothing, and to dare every thing, was the sum and substance of this doc-trine.

One of the converts to this abominable system v One of the converts to this abominable system was Hassan ben Sabah, who founded, some years after, the society which, during a century and a half, filled Asia with terror and dismay. Hassan was one of those characters which appear from time to time in the world, as if sent to operate some mighty change in the destinies of mankind. Endued with mental powers of the first order, conscious of his own superiority, filled with the most immoderate ambition, and possessed of the courage, patience, and foresight re-quisite for the accomplishment of his deep-laid schemes, and possessed of the courage, patience, and foresign requisite for the accomplishment of his deep-laid schemes, he had been sent by his father, whose orthodoxy was suspected, to Nishaboor, to be educated by one of the most learned men of the East; and there he formed an acquaintance with several noble youths, who afterwards raised themselves to the highest dignities of the state. Even at this early period, the ambitious mind of Hassan, and his sanguine expectations of future advancement and dignity, displayed themselves, and he was not long of seeing them realised. He was taken notice of by the Sultan Melek Shah, and was soon after made his principal confident. By one of those innotice of by the Sultan Melek Shah, and was soon after made his principal confident. By one of those in-trigues common in courts, he was, however, in a short time deprived of the favour of his sovereign, and was dismissed with disgrace. Burning with rage and dis-appointment, he retired to Rei, and thence to Ispahan, appointment, he retired to Rei, and thence to ispanan, and after a short stay there, he proceeded to Egypt, to join the grand lodge of the Ismaelites, a name which the secret society had assumed, and of which society he had for a long time been a member.

Hassan, whose fame had preceded him, was received in Egypt with the highest honours; but soon after,

happening to take an active part in a dispute relative to the succession, his enemies prevailed against him, and he was sent into banishment. He disembarked and ne was sent into banisament. The disembarked in Syria, and spent several years in travelling in the different nations of the East, zealously spreading his doctrines, and acquiring proselvtes. His ambition now was to possess dominion as well as power, and he fixed his eye on the castle of Alamoot (the vulture's nest), a lofty and impregnable fortress in the district of Rood-bar, to the north of Kasveen. This he gained partly by force, and partly by stratagem. So soon as he got This he gained partly gem. So soon as he got

possession of this hill-fort, Hassan changed his plans, and instead of publicly treating all religious belief as the effect of a disordered imagination, he determined to maintain among his followers the religious discipline of Islamism in all its rigour. The most minute observance of the most trivial ordinances was exacted from those who, generally unknown to themselves, were leagued for its destruction; and the veil of mystery behind which few were permitted to enter shrouded the secret doctrine from the eyes of the major part of the society.

of mystery behind which few were permitted to enter shrouded the secret doctrine from the eyes of the major part of the society.

The Ismaelite doctrine had hitherto been disseminated by missionaries and companions alone: a third class was required, which, ignorant of the secret doctrine, would blindly obey the orders of their superiors. This class was named Fedavee, or the Devoted. The members were clothed in white, with red bonnets or girdles, and were armed with daggers. These were the men, who, reckless of their lives, executed the bloody mandates of the Sheikh-el-Jebel, the title assumed by Hassan. As a proof of the fanaticism which Hassan contrived to instil into his followers, we give the following instance. In the year 1126, Hasim-ed-devlit Absoucar, the brave prince of Mosul, was, as he entered the mosque, attacked by eight assassins disguised as dervises; he killed three, and the rest, with the exception of one young man, were cut to pieces by the people; but the prince had received his death-wound. When the news spread that Hasim had fallen by the daggers of the assassins, the mother of the youth who had escaped painted and adorned herself, rejoicing that her son had been found worthy to offer up his life to the good cause; but when he returned, the only survivor, she cut off her hair and blackened her face, through grief that he had not shared the glorious death of martyrdom.

A display of the means by which the chief of the Assassins succeeded in refusing this spirit of unbounded faith and devotion into his followers, forms an interesting chapter in the history of the human race. Those who reflect on the follies of the disciples of the various fanatics and impostors who have decived mankind, will not be surprised at the blind devotion of the Fedavee. Even in our own days, the

of the various fanatics and impostors who have de-ceived mankind, will not be surprised at the blind devotion of the Fedavee. Even in our own days, the chief of the Wahabees could persuade his followers that he had it in his power to dispose of the mansions of eternal bliss.* It is not undeserving of remark, that he had it in his power to dispose of the mansions of eternal bliss.* It is not undeserving of remark, that the two powers which waged war simultaneously upon Islamism, were both stimulated, by their spiritual heads, with the same prospects of reward. Those who fell in the crusades were pronounced by the Pope to be martyrs, and entitled to the kingdom of heaven; and to the Fedavee who fell in executing the mandates of his superior, the gates of paradise were thrown open, and he entered into the enjoyment of the ivorry palace, the robe of silk, and the black-eyed houries. This, it is said by Marco Paolo, was no ideal reward. At Alamoot and Masiat in Syria were the most delightful gardens, into which the young novice was, while in a state of stupefaction, the result of some narcotic, introduced; and there, amid a succession of pleasures, presented with a foretaste of the joys of a Mahometan paradise. Ever after, the rapturous vision possessed the imagination of the deluded enthusiast, and he panted for the hour when death, received in obeying the commands of his superior, should dismiss him to the bowers of the celestial paradise.

Here we have the true origin, according to De Sacy, of the term Assassin. Hyde derived it from Hassa, to kill; others from the Jewish Essenes; the Hassa, to kill; others from the Jewish Essenes; the prevailing derivation, which is also adopted by Sir John Malcolm, is from Hassan, the first chief; Lemoine was nearer the truth when he derived it from a word signifying herbage, and consequently gardens; but, according to De Sacy, whose opinion is adopted by Von Hammer, the true root is hashish, which signifies the hangue, or oniate of hemp leaves; and that by Von Hammer, the true root is hashish, which sig-nifies the bangue, or opiate of hemp leaves; and that the Assassins obtained their appellation from the use they made of the opiate prepared from that plant. The power of the order now began to be exhibited. By force or by treachery, the castles or hill-forts of Persia in succession fell into their hands. A bloody

Persia in succession fell into their hands. A bloody period ensued; the doctors of the law excommunicated the adherents of Hassan, and the Sultan Melek Shah gave orders to his generals to reduce their fortresses; the daggers of the Assasins were opposed to the swords of the orthodox, and the first victim to Hassan's revenge or the orthodox, and the first victim to Hassan's revenge was the companion of his youth, the great and good Nizamul-mulk, the prime minister of the sultan, who fell by the dagger of a Fedavee. His death was followed by that of his sovereign, who was suddenly carried off, not without strong suspicion of poison. At the period of the crusades, the Assassins appeared in Syria, and, by means of Riswan, prince of Alexno.

eriod of the crusades, the Assassing approach and, by means of Riswan, prince of Aleppo, in that country. In Syria, as in in Syria, and, by means of Riswan, prince of Aleppo, acquired fortresses in that country. In Syria, as in Persia, they were persecuted and massacred; and there, also, the dagger amply avenged those who fell by the sword. After a protracted contest in Persia. a dagger was one morning found stuck in the ground by an unknown hand, at the head of the Sultan San-jer. This reminded him of continued enmity, and induced him to seek for peace. A treaty was in con-

A follower of the modern Wahabee, who, a few years ago, stabbed an Arabian chief, near Bassora, not only refused to save his life, but anxiously counted death, grasping in his hand a vaper which he seemed to prize far beyond his existence. This when examined proved to be an order from the Wahabee chief, for an emerald palace and a number of beautiful female slaves, to be given him in the delightful regions of eternal bliss.

sequence entered into between the sultan and the sheikh of Alamost. The Ismaelites agreed on their part to add no more to the strength of their forts, to purchase no arms or military machines, and to make no more proselytes, and the sultan released them from certain taxes, and assigned them a portion of his revenues as an annual pension.

After a reign of thirty-five years, Hassau hen Sabah saw his power extended over a great portion of the biohammedan world. Three grand missionaries presided over the three provinces of Jebal, Cuhistan, and Syria, while, from his chamber at Alamoot (which apartment he left but twice during his long reign), Hassan directed the operations of his followers, and employed his leisure hours in drawing up rules and regulations for the government of the order. He died at a very advanced age, leaving no children, for he had previously put both his sons to death, the one for the crime of murder, and the other for trespassing some trifling precept of the Koran. When he felt the approach of death, be summoned his two superintendants, Keah Buzoorg and Abou All, before him, and appointed them his successors; Buzoorg to direct the civil and military, and Ali the spiritual affairs of the order.

Buzoorg trod in the footsteps of the founder of the

direct the civil and military, and Ali the spiritual affairs of the order.

Buzoorg trod in the footsteps of the founder of the order. Hostilities were renewed between him and the sultan, and Alamoot fell for a time into the hands of the ensemy. But the power of the order had taken too deep root to be easily overthrown, and it soon recovered from its disasters. In Syria, too, though violently opposed, it extended its influence, and it was thus situated when the crusaders first came in contact with its followers. Their first approaches were of a friendly nature, for we find that Aboul Wefa, the Ismaelite Grand Prior, as we may call him, and at the same time chief judge of Damascus, entered into a treaty with Baldwin the Second, king of Jerusalem, to deliver Damascus into his hands, on condition of receiving the city of Tyre as his reward. The enterprise, however, failed; the governor got timely information of the plot; the vizier, the great friend and protector of the Assassins, was put to death; and an indiscriminate massacre of the Ismaelites took place, in which 6000 fell victims.

Buzoorg departed from the maxims of the founder.

fell victims. Buzoorg departed from the maxims of the founder, by appointing his son Mohammed as his successor. He was a weak and inefficient prince, but his son and successor, Hassan the Second, was of a more enterprising character. His vanity induced him, contrary to the prudent counsels of the founder, to set himself up as a teacher and illuminator, and by his foolish disclosures of the mysteries of his sect, he justified the curses of the neonless the second property of the church, and the people, the excommunications of the church, and the people, the excommunications of the church, and the persecution of the order by the surrounding so-vereigns. He was, after a short reign, murdered by his brother-in-law and his son Mohammed, who suc-ceded him. This prince rivalled his father in know-ledge, and in the open disregard of all religion and morality. At this period, when the brave Saladin and the crusaders maintained a bloody war in Pales-tine, the grand prior of the Assasins was Sinan, one of those nersonaers who have at various times in the tine, the grand prior of the Assassins was Sinan, one of those personages who have at various times in the East gained, by an extraordinary appearance of austerity and devotion in the eyes of the credulous multitude, the reputation of divinity. He gave himself out to be an incarnation of the Deity; wore no clothing but sackcloth; was never seen to eat, drink, or sleep; and, from sunrise to sunset, preached from the top of a lofty rock to the assembled multitude, who listened to him as to a god. Notwithstanding the risk he ran, on one occasion, of being murdered by his followers, who discovered him to be only a mere mortal, he retained his influence over them during his life, and at present his writings are held in high veneration by the remnant of the sect, which still lingers in the mountains of Syria.

ountains of Syria.

Sinan had read the books of the Christians, and Sinan had read the books of the Christians, and whether from conviction, or, what is more probable, from a wish for peace and exemption from tribute, he sent an ambassador to Almeric, king of Jerusalem, offering, in his own name, and in those of his people, to submit to baptism, if the Templars, their near neighbours, would remit the annual tribute of 2000 ducats which they had imposed on them, and live together in future in peace and amity. The king received the embassy with joy, agreed to all the conditions, offered to reimburse the Templars from his own coffers, and, after having detained the envoy and his suite some days, dismissed them with guides and an escort to their own frontiers. But as they approached their castles, Walter of Dumesnil, who, with a body of Templars, had lain in ambush, assaulted them, and in the fray murdered the ambassador. Almeric, incensed at this treacherous and cruel action, assembled the princes of the crusade, and, by their advice, sent to demand satisfaction of the grand master, Odo de St Amande. The haughty priest gave an evasive answer, which so enraged the king, that he ordered the murderer to be dragged from the habitation of the Templars, and thrown into a prison in Tyre. The perfidious grand master was himself soon after made a prisoner by Saladin, and in the same year perished unlamented in a dungeos. Almeric had no difficulty in exculpating himself in the opinion of Sinan; but all hopes of the conversion of the Assasins were now at an end, and the dagger, after a truce of forty-two years, was again brandished against the crusaders.

the crusaders.

Its most illustrious victim was Conrad, marquis of

Tyre and Montferrat, the guilt of whose death, both oriental and occidental writers agree in ascribing to the gallant Richard Cœur de Lion. Conrad was attacked and murdered in the market-place of Tyre, by two of the Assassins. The king of England was known to be his enemy, and Albericus Trium Fontium says expressly that the murderers were hired by him. Bohadin, the Arabic historian, thus writes:—"The marquis went to visit the bishop of Tyre. As he was going ont, he was attacked by two Assassins, who slew him with their daggers. When taken and stretched on the rack, they confessed that they had been employed by the king of England. They died under the torture." He also observes, that nothing could be settled with Richard, "because he always broke off what he had arranged, by continually retracting what he had said. May God curse him!" Cœur de Lion, however much his countrymen may have wished to make him appear so, cannot, we are sorry to say, be declared innocent of the murder of the marquis. We shall not, however, insist upon this point, which has proved a subject of no little dispute, but only revert to the curious circumstance, that we should be beholden to an Arabic author for the knowledge of certain points in the character of a king of England.

The reign of Jellal-ed-deen, who succeeded his father Mohammed, was a period of repose for Asia. He directed all his efforts to restore religion and piety; sent circular letters for this purpose to the caliph and sultan, and other princes; was dignified by the doctors of the law, who were convinced of his sincerity, with the appellation of New Mussulman, and obtained from the caliph the title of Prince, which had never been granted to any of his predecesors. His harem made the great pilgrimage to Mecca, and the caliph gave precedence to his banners over those of many other princes. But his reign was too short to be productive of much benefit to mankind, and on his death, occained by poison. the dagger was again unsheated by

granted to any of his predecessors. His harem made the great pilgrimage to Mecca, and the caliph gave precedence to his banners over those of many other princes. But his reign was too short to be productive of much benefit to mankind, and on his death, occasioned by poison, the dagger was again unsheathed by his kindred, at the command of his son, Ala-ed-deen, a boy of nine years of age, and the murder of the prince was avenged amid torrents of blood.

Ala-ed-deen, after a disastrous reign, was murdered in his turn, and was succeeded by his son, Roken-ed-deen, who had joined in the conspiracy against him. In his time, the caliph of Bagdad and other princes invoked the mighty Mangoo Kaan to rid the earth of this band of murderers, who rendered life wretched to those who dared to provoke their resentment, and the conqueror of the world gave orders to his brother Hulagoo to exterminate the hated race. His orders were obeyed. The treachery of the chief astronomer and vizier of the Assassin prince facilitated the operations of the Tartars; Alamoot surrendered; and Roken-ed-deen was brought a prisoner to the camp of Hulagoo. The other fortresses of the order followed and rates of the Tartars; Alamoot surrendered; and Roken-ed-deen was brought a prisoner to the camp of Hulagoo. The other fortresses of the order followed the example of Alamoot, except Kirdeoo, which for three years resisted the efforts of the Tartar troops, when it fell into their hands. Orders for the indiscriminate massacre of the Assassins. wherever found, were given by Mangoo, and, without distinction of age or sex, they fell by thousands beneath the sword of justice and of vengeance. Fourteen years afterwards, the Syrian branch was destroyed by Bibars, the great Mameluke sultan; and though the sect, like the Jesuits, still clung together, in hopes of once more attaining to power, the opportunity never presented itself. And the merchants and peasants who at this day still hold the speculative opinions of the order, are scarcely aware of the bloody part it once enacted on the theatre of the world.*

DESTRUCTIVE KISSING.

Cicero speaks of a bronze statue of Hercules which had the features worn away by the had the features worn away by the frequent oscula-tions of the devout. Several instances of the same kind have occurred in modern times. The face of a figure of the Saviour among the bronze has reliefs which adorn the Casta Santa at Loretto, has in this way been quite kissed away. The foot of the famous which adorn the Casta Santa at Loretto, has in this way been quite kissed away. The foot of the famous statue of St Peter, in the Vatican, has lost much of its metal by the continual application of the lips and foreheads of votaries; and it has been found necessary to protect the foot of the statue of the Saviour by Michael, in the Minerva, from similar injury, by a brass buskin.

BUSINESS

Business, says a celebrated writer, is the salt of life, which not only gives a grateful smack to it, but dries up those crudities that would offend, preserves from putrifaction, and drives off all those blowing flies that would corrupt it. Let a man be sure to drive his business rather than let it drive him. When a man is but once brought to be driven, he becomes a vassal to his affairs. Reason and right give the quickest dispatch. All the entanglements that we meet with arise from the irrationality of ourselves or others. With a wise and honest man a business is soon ended, but with a fool and knave there is no conclusion, and seldom even a beginning.

REPLY OF DIOGENES THE CYNIC.

Diogenes the Cynic being interrogated what benefit he reaped from his barbarous philosophical researches, and his pursuit of wisdom—"If I reap no other benefit," says he, "this alone is sufficient compensation, that I am prepared to meet with equanimity every sort of fortune."

* From the "Literary Rambler" (a periodical work publish at Glasgow). 1839.

NATURAL HISTORY. THE FOX.

THE fox inhabits almost every temperate country in the world, and in each he is distinguished for craftiness of character. There is great diversity of opinion respecting the different varieties of foxes; som considering them simply as varieties, changed and modified in their form from local circumstances, while others rank them as distinct species. These differences, however, are not so conspicuous as in the great

varieties of the common dog.

Of the distinctive properties between the fox and dog, the most striking is in the structure of the eye. In dogs, the iris uniformly contracts around the pupil, in the form of a circle; while, in the fox, if observed under the influence of a strong light, it is seen to close in a vertical direction, the pupil assuming the figure of a section of a double convex lens. The object of this provision is obviously to exclude the rays of

light

The fox is of a wild and ferocious disposition, so much so, that it is hardly possible to render him wholly tame. Perhaps there is no predatory animal more cunning than he is, not only in providing himself with a secure retreat wherein to repose and rear his young, but also in the stratagems he employs for catching his He feeds indiscriminately on lambs, geese, fowls, hares, rabbits, and small birds of all kinds: his fondness for grapes renders him a great annoyance to the vineyards of France.

The fox seldom fails to establish his habitation near some farm or village, so that he may the more easily attack the poultry, which appear to be his favourite food; and he often commits great depredations in oultry-yards, destroying in a single evening every thing that has life. When all other kinds of food fail him, he will destroy serpents, lizards, toads, moles, frogs, rats, and mice; and when extremely pressed by hunger, like the dog he will feed on roots and other vegetable substances; but this is only in cases of extreme necessity: he is also known to eat crabs, shrimps, or other shell-fish.

The fox sometimes runs down his prey, and at others he slips cautiously forward, like a cat, dragging his body on the ground, and then makes a sudden bound at his booty, seldom missing his aim. He either conceals it among bushes or herbage, or carries it off to his burrow. In this manner, he returns repeatedly to his work of destruction, and generally keeps a considerable supply of provisions in store, but always in different places, to serve him under his various necessities; but it is seldom he prolongs these excursions after sunrise.

after sunrise.

Fox-hunting has long been a favourite British fieldsport, and in no other country is it pursued with such
ardour and intrepidity. Both our dogs and horses are
bred with particular care for this pastime, and are
justly prized by all neighbouring states. The instant
the fox finds himself pursued, he makes for his hole;
but when it is intended to hunt a district, the huntsman or earth-stopper takes care to fill up the entrance
to his burrow when he is out in search of food, so that
he can only have recourse to his speed and cunning man or earth-stopper takes care to hil up the entrance to his burrow when he is out in search of food, so that he can only have recourse to his speed and cunning for his safety. He does not double, like the hare, but takes a straightforward course with strength and perseverance, and sometimes leads his pursuers a distance of fifty miles at a stretch, without the smallest internission. Both dogs and horses, particularly the latter, frequently fall victims in such arduous chases. His strength is so great that he frequently escapes the utmost efforts of his enemies to take him, and returns to his hole in safety. But when all shifts have failed him, and he is at last overtaken, he de-fends himself with great obstinacy, and silently fights till he is literally torn to pieces by the merciless dogs. On the 28th of October 1815, the hounds belonging to the Newry hunt started a fox at Tamary. After a short chase, reynard disappeared, having cunningly mounted a turfstack, on the top of which he lay down flat. Finding himself at last perceived by one of the hounds, he left his retreat, closely pursued by the pack. Being again hard pressed, he ran up a stone ditch, from which he sprang on the roof of an adjoining cabin, and mounted up to the chimney top. From

from which he sprang on the roof of an adjoining cabin, and mounted up to the chimney top. From that elevated situation he looked all around him, as if carefully reconnoitring the coming enemy. A cunning old hound approached, and, having gained the summit of the roof, had already seized the fox in imagination, when, lo! reynard dropped down the chimney, like a fallen star into a draw well. The dog looked wistfully down the dark opening, but dared not pursue the fugitive. Meantime, whilst the hound was eagerly inspecting the smoky orifice of the chimney, reynard, half enrobed in soot, had fallen into the lap of an old woman, who, surrounded by a number of children, was gravely smoking her pipe, not at all expecting the entrance of this abrupt visitor. "Emiladh deouil!" said the affrighted female, as she threw from her the black-red quadruped. Reynard grinned.

growled, and showed his fangs; and when the sportsmen, who had secured the door, entered, they found him in possession of the kitchen, the old woman and the children having retired, in terror of the invader, to an obscure corner of the room. The fox was taken alive, by William Gordon of Sheepbridge, Esq. Some years ago, in Dumfriesshire, a fox was fairly halloced from a hiding-place, amids a ledge of rocks, high, secluded, and inaccessible, yet withal conveniently enough situated for those nightly forays by which he had laid half the hen-roots in the district under repeated contribution. As the hounds were at hand, the felon bounded away through brush and brake, distancing his pursuers in the first instance, and holding out the promise of an excellent day's sport. These exertions, however, were too violent to be long continued, and the hunters knew, from the sport. These exertions, however, were too violent to be long continued, and the hunters knew, from the increased yelling of the pack, that it was gaining upon the enemy every moment. At this juncture, a gentleman who rode foremost in the chase observed the animal pause, look round, and then bound away, apparently with fresh vigour and greatly increased speed. Attracted by this circumstance, he rode up to the spot parently with fresh vigour and greatly increased speed. Attracted by this circumstance, he rode up to the spot, and there found a very young cub, which the affectionate mother had carried at least two miles in her teeth, and which she did not abandon till the very last extremity. Situated as they were, the party had no means of restoring the cub, but as a reward for the fidelity of the mother, the whipper-in was immediately ordered to call off the dogs, and recommence the sports of the day in a totally different quarter.

The fox generally brings forth from three to six at a litter, and only once a-year. They are blind, and of a dark-reddish brown. They do not reach their full size till eighteen months old, and live to the age of from fourteen to sixteen years.

of a dark-reddish brown. They do not reach their full size till eighteen months old, and live to the age of from fourteen to sixteen years.

Sir Walter Scott, in his "Picturesque Scenery and Antiquities of Scotland," relates a curious anecdote of a fox-hunt, in which he was himself concerned. The hounds, which belonged to the Duke of Buccleuch, had had a long chase, and at last the fox made for Crichton Castle, and, leaping in at a window, endeavoured to find refuge in some of the holes or bores of that vast ruin. The hounds followed him, however, and soon compelled him to take his departure by a channel similar to that by which he had entered. It was then, Sir Walter informs us, one of the most singular and striking sights he ever witnessed, to see the long stream of dogs pouring out of a high window upon the ground, as if it were a cascade of animated creatures, variegated by numerous colours.

In the autumn of the year 1819, at a fox-chase in Galloway, a very strong one was hard run by the hounds, and finding himself in danger of being overtaken, made for a high wall at a short distance, and springing over it, crept close under the other side; the hounds followed him, but no somer had they leant

springing over it, crept close under the other side; the hounds followed him, but no sooner had they leapt the wall, than he again sprang over it, and, by this cunning device, gave them the slip, and got safe away

Mr Hawkins of Pittsfield, an American gentleman, was in pursuit of foxes, accompanied by two blood-hounds; the dogs soon found a fox, and pursued him for nearly two hours, when suddenly they appeared at fault. Mr Hawkins came up with them near a large log of wood lying on the ground, and felt much surprised at seeing them take a circuit of a few roods without having an object in view, every trace of reynard seeming to have been lost, while they still kept yelping. On looking about him, he discovered the sly fox stretched upon the log apparently lifeless. Mr Hawkins made several unsuccessful efforts to direct the attention of the dogs towards the fox. At length he approached so near the artful object of his pursuit as to see him distinctly breathe. Even then reynard exhibited no alarm, and Mr Hawkins seizing a branch of a tree that lay hard by, aimed a blow at him, which the fox evaded by a leap from his singular lurking place, having thus for a time effectually deceived his pursuers, and got clear off.

When the old Duke of Grafton had his hounds at Crowden in the street of the surprise of the surpris from his pursuers.

Mr Hawkins of Pittsfield, an American gentleman

rsuers, and got clear off.
When the old Duke of Grafton had his hounds at when the old Duke of Grafton had his hounds at Croydon, it was his custom to have foxes taken occasionally in Whittlebury forest, and sent up in the venison cart to London. The fox thus brought was carried down the next hunting morning in a hamper behind the duke's coach, and turned out for the sport of the day. In pursuance of this plan, a fox was taken in a coppice in the forest, and sent up as usual. After a certain time, a fox was taken in the same coppice, whose size and appearance was so strikingly like that caught on the same spot before, that the keepers employed on the occasion expressed their suspicion that it was the same fox; and the man whose office it was to go to London with the venison, was directed to inquire whether the fox hunted on such a day was killed, or escaped. The latter having been the case, the suspicion of the keepers was at least considerably strengthened.

After a short time, a fox was again taken in the same coppice, which those concerned in taking it were well assured to be the same as was caught there before. To be, however, better able to identify their supposed old friend, if another opportunity should offer, before sending him off the third time he was marked in several holes, and in different manners, his lip being cut, one ear slit, and everal holes punched through the

sending him on the third time he was marked in several places, and in different manners, his lip being cut, one ear slit, and several holes punched through the other. Thus marked, reynard was again dispatched to London, again hunted, and again escaped, and, within a very few weeks, was again taken in the same coppice, when his marks justified their former con-

jectures in spite of the seeming improbability of the fact. This poor animal was destined once more to put his strength and sagacity to the test, when the one or the other failed him, and he was caught by the hounds after a good chase, bearing the marks of his former escapes, which ought to have entitled him to the privilege formerly granted to a stag who had been fortunate enough to escape from his royal pursuers.

The following singular occurrence took place in the end of May 1829. As the forester on the estate of Auchenreoch, parish of Campsie, Ayrshire, proceeded to a field about seven in the morning, he was unexpectedly saluted by the howling of two full-grown foxes, which obstructed him in his course with so determined a resistance, that he was glad to call another

foxes, which obstructed him in his course with so de-termined a resistance, that he was glad to call another man to his aid before he could drive them off. On proceeding a short way, a third fox was discovered hanging from a young ash tree, about three feet from the ground, with its shoulders firmly wedged between the forked branches. So hard had reynard strug-gled for liberty, that one of its fore-legs was bro-ken; they succeeded, however, in taking it alive.

PHYSICIANS.

SIR WILLIAM TEMPLE relates the following anec dote of Dr Rujean, the most celebrated man of the medical profession in his time: A certain great lady came to him in much distress about her daughter, and the physician began the investigation of the case by asking, "Why, what ails she?" "Alas! doctor," replied the mother, "I cannot tell; but she has lost her humour, her looks, her stomach-her strength sumes every day, so as we fear she cannot live." "Why do you not marry her?" "Alas, doctor, that we would fain do, and have offered her as good a match as ever she could expect." "Is there no other that you think she would be content to marry? "Ah, doctor, that is it that troubles us; for there is a young gentleman we doubt she loves, that her father and I can never consent to." "Why, look you, madam," replied the doctor, gravely, being among all his books in his closet, "then the case is this: your daughter would marry one man, and you would have her marry another. In all my books I find no remedy for such a disease as this."

This story is an apposite illustration of the preposterous circumstances under which some people expect to derive benefit from medicine; but it is not often that they have the candour to explain the real state of the case. Many have a delicate tenderness for their own feelings, which withholds all information that might assist the physician in detecting the origin and nature of their disease; while, at the same time, they are so unreasonable, and have so little consideration, not only for the feelings but for the character of another, that they expect he will not misapprehend a single symptom, and exclaim vehemently against him if his treatment do not prove successful. Yet, where maladies depend upon the passions and affections so much as they must always do in a highly cultivated state of society, it is impossible to remove them, unless, besides the present bodily sensations, a faithful account be also rendered of the incidents in the patient's history which first disturbed the tranquillity of his mind, and thereby disordered the functions of his body. It is true that such communications would lead to a disclosure of family and personal secrets almost as unreserved as was formerly exacted at the confessional; it cannot, therefore, be expected that they should be made to any great extent; but people should at least learn not to be disappointed, and not to be angry because a cure is not performed, when they have themselves prevented it by concealing particulars that the medical attendant ought to have been made aware of.

But it is not in this way alone that unmerited cenures are heaped upon the professors of the healing art. Such is our love of life, that we can scarcely ever persuade ourselves that any illness is our last; and when a friend is cut off, we are apt to imagine that a more skilful treatment might have saved him. Those, in particular, who belong to the lower classes, seldom see a young person, whose loss they regret, carried to the grave without remarking, that some old woman or other, experienced among sick-beds, "didna think the doctor ever rightly took up (comprehended) his trouble." Undoubtedly this is sometimes the case; both because many diseases are too complicated to be thoroughly understood, and because some practitioners are not so well informed nor so careful as they ought to be; but the allegation is made nine times wrong. ously to one where it is just.

Physicians receive very unfair play from another class of persons who call in their aid, and expect to be behefited by it instantaneously, at the same time that

they by no means follow the injunctions laid down for their observance. A prescription is left; but the patient, felicitating himself upon his own sagacity, disregards it. The next day he does not hesitate to that the drug was duly taken: another medicine is ordered; and for once he makes himself a "good child," and allows it to be administered; but the efficacy of the second depending upon the previous operation of the first, and the first never having been used at all, the system, instead of being set to rights, suffers of course a farther derangement—a deterioration which is unscrupulously attributed to the doctor's ignorant treatment of the disorder. It never for a moment enters the patient's head that this treatment is not the doctor's, whose orders were disobeyed at the very outset; on the contrary, he observes to all who visit him, how fortunate a circumstance it was that he threw the first prescription aside, else matters might have been as bad again with him! We know an honest woman in the country, who, during a long illness, was attended by a regular practitioner, whose advice she sometimes followed and sometimes not, just as her caprice happened to suggest; but all the time she assiduously swallowed the doses of a certain cele-brated empiric. If she enjoyed a day of ease, the quack was sure to get the credit of it: "it was untelling," she said, "the good she had gotten of his pills." Her intervals of suffering were with equal confidence scribed to the mismanagement of the physician.

It is no wonder if medical men, not suspecting such gross deceptions in their patients, and seeing their prescriptions produce, as they are led to suppose, effects so different from what they have always een them do in similar cases, begin to think they have mistaken the nature of the disease, and modify their treatment according to the misrepresentations of their employer. The consequence is, that no satisfactory result is obtained; the sick person, peevish and discontented, lays the whole blame on the doctor, whom he has from the beginning made it his business to mislead: calls in, in succession, four or five more, whom he deludes and discharges in the same manner; and ultimately, as the proper punishment for such a train of disingenuous proceedings, falls into the hands of a quack, who protests there never was such a set of impostors as the regular members of the medical faculty, declares that he will accomplish a cure in a he could have done it in a few days but for previous mismanagement—and, to use a vulgar phrase, "does for him" in considerably less than that time. The relatives take the tone of their opinion from the unwarranted assertions of this interloper, and the remark flies about—"Poor man! he was killed by the doctors. The man he at last consulted had some skill, and did a little for his relief; but he was ower far rane afore. -clean wasted away wi' the drugs he had wallowed."

swallowed."

It is in China, we believe, where physicians are not paid unless they effect a cure, and this fact is often quoted by unthinking persons, with the comment that it would be well if the same practice were introduced into this country. But though a disease be not overcome, the sufferings it occasions may often be greatly lightened, and it would certainly be cruel in the extreme to deny to a man, of whom it is certainly known that his last hour is at hand, that alleviation of his expiring pangs which the use of medicine may procure. The doctor, after seeing that a case was hopeless, could have no motive to remain any longer by the cure. The doctor, after seeing that a case was hopeless, could have no motive to remain any longer by the sick-bed, unless humanity prompted him to do so; and if the friends of the sufferer would not part with a few shillings to obtain this kindness for him, it is not to be thought that strangers would often voluntarily stay to perform it. Yet the statement we have alluded to, passing from mouth to mouth, fills the auditors with a high idea of the shrewdness of the people among whom the custom is found, while at the same time they feel as if their own intellect were of an inferior order. We hope enough has been said to convince every one who reads it that there is no occasion here for any such mean opinion of ourselves, but that, on the contrary, the advantage is wholly on our side.

The above remarks have been thrown together principally for the case.

The above remarks have been thrown together principally for the use of our readers in the number walks of life, who, whatever may be their merits in other respects, are frequently—we had almost said habitually—too harsh in the construction they put upon the conduct of their medical advisers—a class of principally for the use of our readers in the humbler habitually—too harsn in the construction they put upon the conduct of their medical advisers—a class of men whose daily and nightly task it is to visit the house of mourning, and whose lives are spent in alle-viating the sufferings of their fellow-creatures. If we were asked to name any profession, the members of viating the sufferings of their fellow-creatures. If we were asked to name any profession, the members of which performed their duties in a more faithful and conscientious manner, we could not do it; and if it were inquired which of all classes of men, as a class, performs the greatest number of benevolent actions and does most, gratuitously, to lighten the geburden of human misery, we would answer

REMARKABLE TRAVELS IN UNCIVILISED

CARVER, IN WORTH AMERICA.

A MULTITUDE of theories have been started by different authors, to account for the origin of the native population of America, prior to its discovery by Europeans. By far the most plausible theory, certainly, is is adopted by Captain Carver, that the progenitors of these people, most probably, found their way originally into America from Chinese Tariary, by the way of Kamschatka; and, in accordance with this idea, some authors have denominated the Peruvians the Chinese of America. " It appears plain to me," says our author, " that a great similarity between the Indians and Chinese is conspicuous in that particular custom of shaving or plucking off the hair, and leaving only a small tuft on the crown of the This mode is said to have been enjoined by the Tartarian emperors on their accession to the throne of China, and, consequently, is a farther proof that this custom was in use among the Tartars, to whom, as well as the Chinese, the Americans might be indebted for it. Many words also are used both by the Chinese and Indians, which have a resemblance to each other, not only in their sound, but their sig-There might possibly be found a similar nification. connection between the language of the Tartars and the American aborigines, were we as well acquainted with it, as we are, from a commercial intercourse with that of the Chinese."

The above theory has been completely followed out, on the principles here stated, by the celebrated Hum boldt, and published by him, some years ago, in his "Researches in America." In that work he observes as follows :- " The nations of America, except those which border on the polar circle, form a single race characterised by the formation of the skull, the colour of the skin, the extreme thinness of the beard, the straight and glossy hair. The American race has a striking resemblance to that of the Mongul nations which include those known formerly by the name of Huns, Kulans, and Kalmucks,"

Owing to various causes, the Indian population of North America could never be very great, and ever since the commencement of their intercourse with Europeans, it has regularly and rapidly decreased. The Red Men at present within the bounds of the United States are stated to be about 120,000. Of these, 20,000 belong to the only five nations that are recognised as such, eastward of the Mississippi. The Chick saws, a people of about 4000, which have been lately bargained off to the west of the Mississippi, are said to have increased ten per cent. in six years. It is very probable that in the course of another century at farthest, the whole progeny of the primitive occupants of the North American continents will be driven into the Pacific Ocean, or quietly absorbed by the flood of civilised population which is spreading, in every direction, so rapidly around them. This was remarked by Justamond, a French writer, more than sixty years " When we consider the hatred," says he, " which the hordes of these savages bear to each other, the hardships they undergo, the scarcity they are often exposed to, the frequency of their wars, the scantiness of their population, the numberless snares we lay for them, we cannot but foresee, that, in less than three centuries, the whole race will be extinct What will posterity then think of this species of men who will exist no more but in the accounts of travel. lers? Will not the times of savages appear to them in the same light as the fabulous times of antiquity do to us? They will speak of them as we do of the Centaurs and Lapithæ. How many contradictions shall we not discover in their customs and manners! Will not such of our writings as may then have escaped the destructive hand of time, pass for romantic

ing the ancient Atalantis?"" The stature of these people is described as being, in general, beautifully proportioned; but they had more agility than strength, and were better calculated for swiftness than hard labour; and hence their bitteres imprecation against an enemy was, that he might be reduced to till the ground. Their features were re gular, with that fierce aspect which they contract-ed in war and hunting. Their complexion was cop-per-colour, and they had it from nature, as all men ecome tawny when they are constantly exposed to the

inventions, like those which Plato has left us concern-

open air. This complexion was rendered still more disagreeable by the absurd custom which all sava have of painting their bodies and faces, either to distinguish each other at a distance, or to make them ives more agreeable to their mistresses, or more formidable in war. Besides this varnish, they rubbed themselves with the fat of quadrupeds, or the oil of fishes, which prevented the intolerable stings of gnats and other insects that swarm in uncultivated counand other insects that swarm in uncultivated coun-tries. These continents were prepared and mixed up with certain red juices, which were supposed to be a deadly poison to the mosquitoes. To these several methods of anointing themselves, which penetrate and discolour the skin, may be added the fumigations they made in their huts to keep off those insects, and the smoke of the fires they kept up all the winter, to warm made in their huts to keep off those insects, and the smoke of the fires they kept up all the winter, to warm themselves and to dry their meat. This was sufficient to make them appear frightful to our people, though they undoubtedly imagined that it added to their beauty. Their sight, smell, hearing, and all their senses, were remarkably quick, and gave them early posice of their Their sight, smell, hearing, and all their senses, were remarkably quick, and gave them early notice of their dangers and wants. These were few, but their diseases were fewer. They hardly knew any distempers but what were occasioned by too violent exercise, or eating too much after long abstinence.

The extreme ferocity manifested by these tribes, in the killing of their enemies, by scalping them and sucking their blood, as also their fiendish manner of

torturing their prisoners to death, whilst the said prisoners seem to have possessed the power of almost entirely repressing the feeling of pain under the hands of their tormentors, are circumstances which have often been detailed, and, therefore, a description of such matters at present would have little of novelty to recommend it. "This method of tormenting their enemies," says our author, "is considered by the In-dians as productive of more than one beneficial consequence. It satiates, in a greater degree, that diabo-lical lust of revenge which is the predominant passion in the breast of every individual of every tribe, and i gives the growing warriors an early propensity to that cruelty and thirst for blood which is so necessary a qualification for such as would be thoroughly skilled

unalification for such as would be thoroughly skined in their savage art of war.

"I have been informed that an Indian who was under the hands of his tormentors, had the audacity to tell them that they were ignorant old women, and did not know how to put brave prisoners to death. He acquainted them that he had heretofore taken some of their warriors, and, instead of the trivial punishments they inflicted on him, he had devised for them the most excruciating torments; that, having been the most excruciating torments; that, having ound them to a stake, he had stuck their bodies full bound them to a stake, he had stuck their bodies full of sharp splinters of turpentine wood, to which he then set fire, and, dancing around them, enjoyed the agonizing pangs of the flaming victims. This bravado, which carried with it a degree of insult that even the accustomed ear of an Indian could not listen to unmoved, threw his tormentors off their guard, and shortened the duration of his torments; for one of the chiefs ran to him, and, ripping out his heart, stopped with it the mouth from which had issued such provoking language."

such providing language."

If any of the men-prisoners are spared, which is often the case, by their being adopted into the tribe, they are commonly given to the widows that have lost their husbands by the hand of the enemy, if there be any such, to whom, if they happen to prove agreeable, they are soon married. But should the dame be otherwise engaged, the life of him who falls to her lot is in great danger, especially if she fancies that her late husband wants a slave in the country of spirits, to which he is gone.

husband wants a slave in the country of spirits, to which he is gone.

A tall handsome prisoner had lost several of his fingers in battle. This circumstance was not noticed at first. "Friend," said the widow to whom he was allotted, "we had chosen thee to live with us; but in the condition I see thee, unable to fight and to defend us, of what use is life to thee? Death is certainly preferable." "I believe it is," answered the savage. "Well, then," replied the woman, "this evening thou shalt be tied to the stake. For thy own glory, and for the honour of our family, who have adopted thee, remember to behave as a man of courage." He promised he would, and kept his word. For three days he endured the most cruel torments with a constancy and cheerfulness that set them all at defiance. His new family never forsook him, but encouraged him by their applause, and supplied him with drink and tobacco in the midst of his sufferings!

"How shall we account for this insensibility?" says Justamond. "Is it owing to the climate, or to their manner of life? No doubt, colder blood, thicker humours, a constitution rendered more phlegmatic by the dampness of the air and the ground, may blunt the irritability of the prevous average in Canada.

the dampness of the air and the ground, may blunt the irritability of the nervous system in Canada. Men who are constantly exposed to all the inclemencies of the weather, the fatigues of hunting, and the perils of war, contract such a rigidity of the fibres, such a habit of suffering, as makes them insensible to pain. It is said, the savages are scarce ever convulsed in the agonies of death, whether they die of sickness or of a wound. As they have no apprehensions either of the approaches or the consequences of death, their imagination does not suggest that satisficial sensibility. approaches or the consequences of death, their imagination does not suggest that artificial sensibility against which nature has fortified them. Their whole life, both natural and moral, is calculated to inspire them with a contempt of death, which we so much

dread, and to enable them to overcome the sense pain, which is heightened by our indulgences."

The Indians, as might be supposed, were never greadepts in astronomy, but, as Carver informs us, the seem nevertheless to have had a very rational method. seem nevertness to have and a very rational method of dividing their time. They count their years by winters, or, as they express themselves, by snowa. They generally divide their years by moons, and make them consist of twelve lunar months, observing, when them consist of twelve lunar months, observing, when thirty moons have waned, to add a supernumerary one, which they term the lost moon; and they then begin to count as before. They pay a great regard to the first appearance of every moon, and, on the oc-casion, always repeat some joyful sounds, stretching at the same time their hands towards it.

Every month has with them a name expre Every month has with them a name expressive of its season; for instance, they call the month of March (in which they generally commence their year at the first new moon after the vernal equinox) the worm month, or moon, because at this time the worms quit their retreats in the bark of the trees, wood, &c., where they have sheltered themselves during the winter.

The month of April is termed by them the month of plants; May, the month of flowers; June, the hot moon; July, the buck moon. The reason for thus denominating these is obvious.

August, the sturgeon moon; because in this month asy catch great numbers of that fish.

they catch great numbers of that fish.

September, the corn moon; because in that month
they gather in the Indian corn, which is their only
agricultural produce, and even that is managed chiefly the wom

October, the travelling moon; as at this time they leave their villages, and travel towards the places where they intend to hunt during the winter.

November, the beaver moon; for in this month the beavers begin to take shelter in their houses, having laid up a sufficient store of provisions for the

winter se

winter season.

December, the hunting moon; because they employ this month in pursuit of their game.

January, the cold moon; as it generally freezes harder, and the cold is more intense in this than in any other month.

February, they call the snow moon; because more snow commonly falls during this month than any other throughout the winter.

When the moon does not shine, they say she is dead, and some call the three last days of it the naked days. The moon's first appearance they term its coming to life again. They have no such division as that of weeks: but days they count by sleeps, half coming to life again. They have no such division as that of weeks; but days they count by sleeps, half days by pointing to the sun at noon, and quarters by the rising and setting of the sun, to express which in their traditions they make use of very significant hieroglyphics.

In regard to arithmetic, their ideas are extremely circumscribed; and though they are able to count, in general, as high as thousands, figures, as well as

in general, as high as thousands, figures, as well as letters, appear mysterious to them, and quite above their comprehension.

"During my abode with the Naudowessies," says our author, "some of the chiefs, observing one day a draught of an eclipse of the moon in a book of astronomy which I held in my hand, they desired I would permit them to look at it. Happening to give them the book shut, they began to count the leaves till they came to the place in which the plate was. After they had viewed it, and asked many questions relative to it, I told them they need not to have taken so much pairs to find the leaf on which it was drawn, for I could not only tell in an instant the place, without could not only tell in an instant the place, without counting the leaves, but also how many preceded it. They seemed greatly amazed at my assertion, and begged that I would demonstrate to them the possibegged that I would demonstrate to them the possibility of doing it. To this purpose I desired the chief that held the book to open it at any particular place, and just showing me the page, carefully to conceal the edges of the leaves, so that I might not be able to count them. This he did with the greatest caution; notwithstanding which, by looking at the folio, I told him, to his great surprise, the number of leaves. He counted them regularly over, and discovered that I was exact. And when, after repeated trials, the Indians found I could do it with great readiness, and without ever erring in my calculation, they all seemed as much astonished as if I had raised the dead. The only way they could account for my knowledge was as much astonished as it I had raised the dead. The only way they could account for my knowledge was by concluding that the book was a spirit, and whis-pered me answers to whatever I demanded of it. This circumstance," adds the captain, "trifling as it might appear to those who are less illiterate, contributed to rease my consequence, and to augment the favour-e opinion they already entertained of me."

able opinion they already entertained of me."

These Indian tribes used to go annually, in the month of April, to a great cave situated about thirty miles below the Falls of St Anthony, on the Mississippi, where, a grand council being held with the other tribes, they settled their operations for the ensuing year. At the same time they carried with them their dead, for interment, bound up in buffaloes' skins. On one of these occasions Captain Carver formed one of the company. When they arrived at the great cave, and the Indians had deposited the remains of their deceased friends in the burial-place that stands adjacent to it, they held their great council, at which adjacent to it, they held their great council, at which a great number of speeches :zere delivered on both sides, the fluency of which would astonish an Euro

Vide History of the Settlements in the East and West Indies,
 vol. iv. p. 33.

THE CANONGATE OF EDINBURGH.

a work by R. Cha (From "Reckiana," a work by R. Chambers, just published.)
THE Canongate, which takes its name from the Augustine Canons of Holyrood (who were permitted to build it by the charter of David the First in 1128, and afterwards ruled it as a burgh of regality), was formerly the court end of the town. As the main avenue from the palace into the city, it has borne upon its pavement the burden of all that was beautiful, all that was gallant, all that has become historically interesting in Scotland for the last six or seven hundred years. It still bears an antique appearance, although that was gallant, all that has become historically interesting in Scotland for the last six or seven hundred years. It still bears an antique appearance, although many of the houses are modernised. There is one with a date from Queen Mary's reign, and many may be guessed from their appearance to be of even an earlier era. Previous to the Union, when the palace ceased to be occasionally inhabited, as it had formerly been, by at least the vicar of majesty, in the person of the Lord High Commissioner to the Parliament, the place was densely inhabited by persons of the first distinction. Allan Ramsay, in lamenting the death of Lucky Wood, says—

Oh, Canigate, puir cirich hole,

Oh, Canigate, puir cirich hole,
What loss, what crosses does thou thole!
London and death gars thee look droll,
And hing thy head;
Wow but thou has e'en a cauld coal,
To blaw indeed—

To blaw indeed—
and mentions, in a note, that this place was "the greatest sufferer by the loss of our members of Parliament, which London now enjoys, many of them having had their houses there"—a fact which Maitland confirms. Innumerable traces are to be found in old songs and ballads, of the elegant population of the Canongate in a former day. In the pitiable tale of Marie Hamilton—one of the queen's Maries—occurs this simple but picturesque stanza:—

As she cam doun the Canongait.

As she cam doun the Cannogait, The Cannogait san free, Mony a lady looked ower her window, Weeping for this ladye.

An old popular rhyme expresses the hauteur of these anongate dames towards their city neighbours of the

The lasses o' the Canongate,
Oh, they are wond'rous nice;
They winns gie a single kiss,
But for a double price.
Gar hang them, gar hang them,
Hich upon a tree,
For sw'll get better up the gate,
For a bawbee!

For we'll get better up the gate,
For a bawbee!

But even in times comparatively modern, this fauxbourg was inhabited by persons of very great consideration. Within the memory of a lady in middle
life, it used to be a common thing to hear, among
other matters of gossip, "that there was to be a braw
fitting+ in the Canongate to-morrow;" and parties of
young people were made up, to go and see the fine
furniture brought out, sitting perhaps for hours in the
windows of some friend on the opposite side of the
street, while cart after cart was laden with magnificence. Many of the houses, to this day, are fit for
the residence of a first-rate family in every respect
but vioinage and access. The last grand blow was
given to the place by the opening of the road along
the Calton Hill in 1817, which rendered it no longer
the avenue of approach to the city from the east. Instead of profiting by the comparative retirement which
it acquired on that occasion, it seemed to become the
more wretchedly squalid, from its being the less under
notice—as a gentleman dresses the least carefully when
not expecting visitors. It is now a secluded, and, in
general, meanly inhabited sulvely, only accessible we more wretchedly squaind, from its being the less under notice—as a gentleman dresses the least carefully when not expecting visitors. It is now a secluded, and, in general, meanly inhabited suburb, only accessible by ways, which, however lightly our fathers and grandfathers might regard them, are hardly now pervious to a lady or gentleman, without shocking more of the senses than one, besides the difficulty of steering one's way through the herds of the idle and the wretched who encumber the street. The only decent approach is, indeed, by that very new road, along the Calton Hill, which has operated so grievously to the depression of this antique place. There is now (1833) only one person of condition in the whole street, Sir William Macleod Bannatye (formerly a Judge of the Supreme Court, under the designation of Lord Bannatyne), who occupies a tall and elegant mansion on the site of the house of the Earls of Wintoun, built by the late Sir John Whiteford, and afterwards occupied by Professor Dugald Stewart. Professor Dugald Stewart.

THE HARE A NATURAL PHILOSOPHER.

Coursing owes all its interest to the instinctive consciousness of the nature of inertia which seems to govern the measures of the hare. The greyhound is a comparatively heavy body, moving at the same or greater speed in pursuit. The hare doubles, that is, suddenly changes the direction of her course, and turns back at an oblique angle with the direction in which she nad been running. The greyhound, unable to resist the tendency of its body to persevere in the rapid motion it had acquired, is urged many yards before it is able to check its speed and return to the pursuit. Meanwhile the hare is gaining ground in the other direction, so that the animals are at a very considerable distance asunder when the pursuit is reconsiderable distance as under when the pursuit is re-commenced. In this way, a hare, though much less fleet than a greyhound, will often escape it.—Cabinet

REMINISCENCES OF AN OLD OFFICER. THE LOOTIES WORSTED.

CAPTAIN JOHN GRANT, senior, 2d battalion 42d re giment (of Glenmorrison, Inverness-shire), was se in command in the fort of Mangalore when besi by Tippoo, in the early part of which he commanded a sortie or sally against the enemy's grand battery, and of another of four guns near it, of which he obtained possession; but the enemy collecting in great force, and finding their works of extraordinary thickness and strength, he deemed it prudent and neces sary to return to the fort, without having completed his object, to which his detachment, as it turned out, was by no means adequate. His conduct was ap-proved of: he was a gallant soldier, and an excellent ood-tempered man.

In the year 1782, when the force under Lieutenant-Colonel Humberston was moving against Tippoo's fort of Paligautcherry, Captain Grant was principally concerned in a little adventure, which might have terminated very disagreeably, but from which he and his small party extricated themselves with great presence of mind, coolness, and gallantry, which did them much credit. He, Lieutenant Charles Sutherland, Serjeant Cummings, Corporal Munro, and a private whose name is not remembered, went out on a party from camp to shoot bullocks, a very common practice, the commissary not having it in his power to procure them regularly for the army. Just as the party had ascended a little hill, they saw advancing towards them a party of the enemy's irregular horse (termed looties), of about twenty in number, and brandishing their drawn swords. Captain Grant's party immediately formed, determined to sell their lives dearly; and he gave orders that one-half should only fire at a time, and that the other half should reserve theirs until those who had fired had again loaded. The whole party were armed. Their first fire brought down ome of the horses and horsemen, which checked them; they again attempted to advance: the next fire produced a similar effect as the first, which so stagred them, that, after a little debate amongst ther selves, they thought it best to abandon the enterprise. which they found more dangerous and disadvantageous than they had expected. In Tippoo's irregular cathan they had expected. In Tippoo's irregular cavalry, the horses were the property of the riders, the loss of which he did not replace to the owners, which will account for their not persevering in their attack on Captain Grant and his brave little party. The Malabar coast had been ruled by Hindoo rajahs, whom Hyder, Tippoo's father, had subjected, and tried to convert to the Mahommedan religion; the consequence of which was, that the inhabitants had consequence of which was, that the inhabitants had forsaken the open country, and had retired to the fortresses and hills; and many of the cattle had been permitted to run wild, and had greatly increased.

mitted to run wild, and had greatly increased.

A LANDSMAN TURNED NAVIGATOR.

Captain Dalyell, 2d battalion 42d regiment (of Largo, Fifeshire), was a man of talent and science; he was killed at Mangalore, and had been previously wounded at Paniera, when Tippoo attacked the force under the command of Lieutenant-Colonel Macleod. The colonel employed Captain Dalyell as chief engineer in erecting the field-works to strengthen his post, for which his education had qualified him.

The Myrtle transport, on board of which were the companies of Lieutenant-Colonel Macleod, Captain Macdonell, and Captain Dalyell, 2d battalion 42d regiment, unfortunately separated from the fleet off the

Macdonell, and Captain Dalyell, 2d battalión 42d regiment, unfortunately separated from the fleet off the Cape of Good Hope; they put into St Augustine's Bay, in Madagascar, the rendezvous. It was in a great measure owing to him that from this they shaped their course for St Helena, as his science enabled him to make the necessary observations, the captain being only a seaman, and no navigator. They had no charts on board, unless the maps in Guthrie's Gazetteer could be so called. At St Helena, they procured proper charts, from whence they made their way good to Madras, where they appeared long after they had been totally given up for lost.

EPIDEMIC.

In the year 1782, a most violent cramp, or a spasmodic affection, was so prevalent and severe, both amongst the Europeans of the troops on the Malabar coast, and amongst the seamen in Sir Edward Hughes' fleet, that it may be said to have been epidemic. It generally first attacked the lower extremities, but soon required to the right parts and proved to the right parts and proved to the sign and the same providers of the same providers and providers are the same providers are the same providers and providers are the same providers and providers are the same providers are the same providers and providers are the same providers and providers are the same providers are the same providers and providers are the same providers and providers are the same providers and same providers are the same providers are the same providers and same providers are the same providers and same providers are the same providers are the same providers and same providers are the same providers and same providers are the same providers are the same providers and same providers are the same providers are the same providers and same providers are the same providers and same providers are the same providers are the same providers are the same providers are the same providers and same providers are the same providers are the same providers and same providers are the same providers are the same providers are the same providers are the same providers and same providers are the same prov generally first attacked the lower extremities, but soon mounted to the vital parts, and proved mortal if not subdued and overcome by friction, the warm bath, and by the free use of opium and mulled spirits. On board the fleet, their coppers were always left full of boiling water, that they might immediately command the warm bath. It was a most fearful disease, and most distressing to witness the agonies of those suffering under it. We believe it had no connection with the cholera, and amongst the troops it was more ring under it. We believe it had no connection the cholera, and amongst the troops it was more prevalent during the monsoon, or rainy seas

On the evening of the 16th or 17th of October 1782, deutenant 8.—, of the 2d battalion 42d regiment,

according to the rules which then existed in favour of the king's service, being senior subaltern in the little army under the command of Lieutenant-Colonel Humthe king's service, being senior subaltern in the little army under the command of Lieutenant-Colonel Humberston, proceeding against Paligautcherry, and being first on the list for that kind of duty, was ordered on detachment from Margaree Catab, in Ramgaree, a distance of about thirty miles, for a supply of ammunition, which was much wanted; and leaving this, he marched next morning with the determination of only taking a sufficient time to allow his little party to cook and eat their rice at noon. His small party consisted only of twenty-five Travancore sepoys (the king of Travancore, our ally, had sent two of his battalions to reinforce us); but a jemantdaar of the Bombay troops (native lieutenant) accompanied him, to assist him, and to act as his interpreter—a very intelligent active little man, who had been repeatedly wounded in the service, to which he was faithfully and zealously attached. The lieutenant's friends, conceiving that the service he was sent on was one of much danger and uncertainty, took leave of him, evidently under the impression that they would not see him again, fearing his party would be intercepted and cut off by the enemy's cavalry. They were, however, mistaken. He met with no molestation, and successfully executed the duty with which he had been entrusted; for he rejoined the army with a loaded English waggon, a tumbril, and seventy boxes of ball-cartridges, carried on coolies' heads, and which they probably would have thrown down and fied had a single horseman appeared.

The English waggon (it had come out with the expedition under Commodore Johnston and General

a single horseman appeared.

The English waggon (it had come out with the expedition under Commodore Johnston and General Meadows) was ill calculated for the kind of roads it had to travel through; and in lending his best exertions to assist it out of a rice field, the lieutenant lost his shoes, and was obliged to continue his march without any, and had it not in his power to replace them for eight or ten days after. Before he marched from Ramgaree, on his way back to the army, his party was reinforced by a havildar and twelve Bombay sepoys, and by eight or nine European soldiers who had been left there sick, had recovered, and had to join the corps to which they belonged.

FORTUNATE ESCAPE

Early in the month of February 1783, Lieutenant S., of the 2d battalion 42d regiment, then an assistant commissary of provisions, was ordered forward from Biddaral to Fatta Hettah with his stores, and with directions to have beef ready for the Europeans of the detachment under the command of Major Campwith directions to have beef ready for the Europeans of the detachment under the command of Major Campbell, 2d battalion 42d regiment, then proceeding by orders from Brigadier-General Mathews against the fort of Arrantpore. Fatta Hetta was only a few miles distant from Biddaral, and as no enemy was suspected to be near, so no guard or escort had been sent with the commissary. Six bullocks were unpacked, his stores lodged, and his butchers had just begun their work, when a small party of Tippoo's looties, of about from fifteen to twenty, suddenly made their unwelcome appearance, galloping into the village with drawn swords, and shouting, with the evident intention of cutting down and making themselves masters of the commissariat. Thus taken by surprise, and without the means of defending themselves, all hands immediately dispersed; and in his speedy retreat the commissary having most fortunately fallen in with some few soldiers of his own corps, who had been permitted to march on in advance of Major Campbell's detachment, with them he immediately ran back with all the haste he could, drove the horsemen off, saved all his stores, and rescued a drummer boy of the 100th regiment, whom a lootie, after having severely wounded him with his sword, had made paisoner, and had ment, whom a lootie, after having severeity wounded him with his sword, had made p. isoner, and had mounted before him. This poor lad was afterwards taken prisoner at Biddaral, with General Mathew's army, and died in confinement.

CELEBRATED LIBRARIES. BODLEIAN LIBRARY.

BEFORE the beginning of the fourteenth century, the Oxford University Library consisted of a few tracts kept in the choir of St Mary's Church, and afterwards in the Old Convocation House, adjoining to the cast and of the church. end of that church.

The first collection of books in Oxford, worthy to be called a library, was left to Durham College, on the site of which Trinity College now stands, by Richard Augerville, Bishop of Durham, tutor to Edward the Third, and afterwards Treasurer and Chancellor of England. These books he had collected in his embassy to France, and they are supposed to have formed the largest collection at that time in England.

the largest collection at that time in England.

The divinity school, and the room above it, were built by Humphrey Duke of Gloucester. This room he furnished with books, to which those in the Old Convocation House were added. The commissioners of reformation, under Edward the Sixth, plundered this library so completely, that it was determined, in full convocation, in 1555, to sell the seats and cases.

About the end of Queen Elizabeth's reign, Sir Thomas Bodley, who died on the 28th of January 1612.

About the end of Queen Engagems reign, Sir Ino-mas Bodley, who died on the 28th of January 1612, built the gallery by which we enter the library, as well as that for pictures. The former he furnished with books, as well as the room over the divinity school, which he was at the expense of refitting for

A little below the church
 Removal.

that purpose. Besides giving his books, which he had collected with great care and expense, he left an estate for sularies to the officers, and to keep the library in repair. For the government of it he drew up some statutes, which were confirmed in convocation, and which are preserved in his own hand-writing in the

statutes, which were commenced which are preserved in his own hand-writing in which are preserved in his own hand-writing in archives of the library.

After the death of Sir Thomas Bodley, the Earl of Pemberoke, by the persuasion of Archbishop Laud, gave to the library almost all the collection of Greek manuscripts which Francis Baroccio, the Venetian, had collected with great pains and cost, and which is thought to be the most valuable that ever came into England at one time. The earl reserved twenty-two of them for his own use; but these were afterwards bought and presented to the library by Oliver Cromwell; and to these Sir Thomas Roe, ambassador to Constantinople, added another choice collection of Greek manuscripts.

Greek manuscripts.

Sir Kenelm Digby having sent into the east to purchase oriental manuscripts, and into Germany to buy curious books, presented a large collection to the library, among which were upwards of two hundred

brary, smoog which were upwarus of two interests manuscripts.

At the desire of Archbishop Laud, the University erected a room over the New Convocation House, and which, by communicating with Duke Humphrey's library (that is, the room over the divinity school), brought the library into the shape of a Roman H, which is its present form. In this part of the library the excellent collection of Archbishop Laud, and that of the learned John Selden, are placed.

the excesses the content of the learned John Selden, are placed.

Besides these benefactors, the library has been greatly increased by many ethers—the principal of which are General Fairfax; Dr Marshall, rector of Lincoln College; Dr Barlow, bishop of Lincoln; Dr Tanner, bishop of St Asaph; Dr Godwin, Dr Rawlinson, Browne Willis. Dr Rawlinson, besides his manuscripts, bequeathed his valuable collection of English coins, seals, &c. to the Bodleian library. Browne Willis, many years before his death, gave his collection of English coins, which he had been forty years collecting. The university being apprehensive that tion of English coins, which he had been forty years collecting. The university being apprehensive that such a present might injure his family, paid him for 150 gold coins, at the rate of four guineas an ounce. He paid a visit to the cabinet every year on St Frideswide's day, and besides enlarging it, gave 1200 tradesmen's tokens, and several manuscripts, exclusive of his own, which he left by will to this library.

These donations, together with several libraries purchased by the University of Dr Huntington, Mr Greaves, Dr Pocock, and many others, and the publications which are added to it daily, have made it one of the largest libraries in Europe.

of the largest libraries in Europe.

SELDEN'S LIBRARY ADDED TO THE BODLEIAN.

SELDEN'S LIBRARY ADDED TO THE BODLEIAN.

It appears that Selden had originally intended to leave his books to the Bodleian library, but, upon being refused the loan of some manuscripts from thence (the university acting agreeably to the statute, which expressly forbids any books to be carried out of the library), he altered his design, and left them to the Society of the Inner Temple, upon this condition, that they, together with the students of the Middle Temple, should erect a proper library for their reception; otherwise his executors were at liberty to bestow them upon any public body. The societies of the Temple rejecting the terms above mentioned, several members of the university, and particularly Mr Thomas Barlow, head librarian, entered into treaty wish the executors, and stating the case properly, requested the books, which, upon certain terms, were granted to them. One of them is, that the "books bee forever heerafter kept togeather in one distincte pile and body, under the name of Mr Selden's Library."

In the beginning of September 1659, the library of the learned Selden was brought into that of Bodley. Anthony Wood laboured several weeks with Mr Thomas Barlow and others, in sorting them, carrying them up stairs, and placing them. In opening some

Anthony Wood laboured several weeks with Mr Tho-mas Barlow and others, in sorting them, carrying them up stairs, and placing them. In opening some of the books, they found several pairs of spectacles, which Mr Selden had put in, and forgotten to take out, and Mr Thomas Barlow gave Mr Wood a pair, which he kept in memory of Selden to his last day.

FOGS AND MISTS.

Foos and mists, when they extend over large surfaces varied with land and water, are generally produced in fine calm weather, after the sun's rays have ceased to warm the earth by the higher masses of air, which have been rapidly cooled in the more elevated regions of the strusthers disconding by their weight, and warm the earth by the higher masses of air, which have been rapidly cooled in the more elevated regions of the atmosphere, descending by their weight, and intermixing with the lower, and lighter, and still warmer strata. These are gradually chilled, until the undermost stratum is affected, first to dampness, then to a slight precipitation, scarcely visible to the eve, and, finally, to mist and fog. The earth, during clear nighta, immediately on the withdrawing of the heat-imparting energies of the sun, begins to emit the particles of heat it had acquired during the day, or in ordinary language, to cool. The atmosphere does the same, but at a much slower rate. In the race, therefore, between the cooling powers of these two bodies, the start is usually made at sunset with the earth's turface warmer than the incumbent air. The first, by its more rapid descent, overtakes the latter at some point of equal temperature, and, passing its singgish competitor, becomes colder, and, of course, instead of warming the stratum of air in contact, as it did in the first part of its course, it now, on the contrary,

becomes an absorber of heat, and, consequently, cools the contiguous bodies. In both these cases, the process is favourable to the formation of mist, but in different modes. In the first, it assists the intermixture of the two differently warmed bodies of air, by keeping up the temperature of the lower one, and by thus increasing its disposition to ascend, the mingling and the deposition are more rapid and complete. In the latter case, it is in the same condition with relation to the air near the surface as the strata above it, namely, cooler, and, therefore, it acts similarly; the surface-air being now between two cooling masses, the rate of its condensation and consequent precipitation of moisture is at least continued, and perhaps increased.

The phenomenon of mists forming over lakes and rivers, when the atmosphere of their banks and adjacent land is entirely free from visible vapour, is a very remarkable one, and has excited considerable attention. The late Sir H. Davy observed and comtention. The late Sir II. Davy observed and com-municated to the public some curious facts, which have contributed very much to our knowledge on the subject. The principal operating cause in producing this singular effect is the difference of the rate of this singular effect is the difference of the rate of cooling, in the absence of the sun findid and in solid bodies. In the surface of the former, the particles, as they cool, sink, and give place to those beneath, which then are warmer, and therefore lighter, producing thus a renewal of surface, and a very slow docrease of its general temperature compared with those of solid bodies, whose particles are motionless among themselves. When those on their surface are cooled, they remain in their place, and are affected by among themselves. When those on their surface are cooled, they remain in their place, and are affected by the superior warmth of the internal particles only in the degree of the conducting power of the body. And this conducting power is found to be extremely feeble in most of the substances which form the solid crust

of our globe.

These conditions being understood, it will be easy to imagine that the portion of the atmosphere which reposes on the surface of the water, will continue warmer after sunset on a clear night, than the contiguous parts which rest upon the adjacent land. From its position, too, with regard to an aqueous surface, it will also obtain a greater load of moisture. If we now suppose the cooled air of a superior stratum to descend in the usual manner upon the masses of air lying upon the earth and the water, which, though closely adjoining, are, with regard to heat and humidity, very differently compounded, we shall find that its descent might produce little or no visible change in the land stratum, while, by its superior weight, it would fall into and partially displace that over the water, intimately intermixing with it, and weight, it would fall into and partially displace that over the water, intimately intermixing with it, and condensing its moisture, and thus creating in the air a visible river or lake of vapour, whose boundaries in a still night would exactly coincide with the banks of the water beneath, however irregular their outline. Mr Harvey observed a mist of this kind hovering in a beautiful stratum over the stream which supplies Plymouth with water. The mist moved in the direc-Plymouth with water. The mist moved in the direc-tion of the running stream, but with a velocity much greater, while it accommodated itself, in a most singreater, while it accommodated itself, in a most sin-gular manner, in its course, to all the turns and wind-ings of the channel. The breadth of the mist was nearly the same as that of the stream, and its average altitude about five feet. The water of the stream was observed to stand at 56°; the air over the water, 47½°; the ground near the mist, 45°; the air above it, 49°.— Companion to the Almanack.

TURNING A CORNER-CENTRIPUGAL PORCE.

A carriage, or horseman, or pedestrian, passing a corner, moves in a curve, and suffers a centrifugal force, which increases with the velocity, and which impresses on the body a force directed from the corner. An animal causes its weight to resist this force, by voluntarily inclining its body towards the corner. As the velocity is increased, the centrifugal force is also increased, and therefore a greater inclination of the body is necessary to resist it. We accordingly find that the more rapidly a corner is turned, the more the animal inclines his body towards it. A carriage, however, not having voluntary motion, cannot make however, not having voluntary motion, cannot m this compensation for the disturbing force which into existence by the gradual chi ange of direction of the motion; consequently, it will, under certain circumstances, be overturned, falling of course outwards, or from the corner.—Cabinet Cyclopædia.

LIGHT.

It is become matter almost of certainty, that the sensation of light is produced in a suitable nervous tissue in the eye, by a trembling motion in another fluid than air, which fluid pervades all space, and in rarity or subtlety of nature surpasses air vastly more than air does water or solids; and while, in sound, different tones or notes depend on the number of vibrations in a given time, so in light do different colours depend on the exient of the single vibrations. Can human imagination picture to itself a simplicity more magnificent and fruitful of marvellous beauty and utility than this! But, farther: As air answers in the universe so many important purposes besides that utility than this: But, larther: As air answers in the universe so many important purposes besides that of conveying sounds—although this alone comprehends language, which almost means reason and civilization— so also does the material of light minister in nume-rous ways, in the phenomena of heat, electricity, and magnetism.—Dr Arnott's Elements of Physics.

NATURAL WOODS OF SCOTLAND

The trees which predominate in quantity are the common birch, the oak, the hazel, and the mountain ash. These generally grow interningled; but in many places entire forests are seen composed of single species. Of the trees which thus occur, the birch is the most common, and next to it the oak. But the oaks of the Highlands bear no resemblance to those of England. Hardly a single tree ever presents itself of the diameter of a foot, which is also the case with the birch. In general, the birch occupies the sides of mountains, while the alder most invariably fringes the streams. The fir is seldom met with in its native state in the northern, or along the coasts of the middle division; but in the central districts of the latter there are still magnificent forests of it. On the shores of Loch Marce, in Ross-shire, the scenery of which is of the most sublime order, the scattered remains of an extensive forest of this tree are still to be seen, and in many other places it is to be met with in small patches; but whenever it was possible to render the woods subservient to the purposes of commerce, the Highland proprietors have not scrupled to strip their estates, and in this desolate condition have they generally left them. The ash, perhaps the most beautiful of our trees, is hardly a native; nor do we remember having met with it in any place where we could suppose it of spontaneous growth, excepting the upper end of Loch Awe, the entrance of Loch Carron, and the sides of Loch Katrine. Next to it in grace and beauty is the mountain ash, which is of frequent occurrence. Many of the Highland glens are decorated by the bird-cherry, a tree whose beautiful chaters of white drooping flowers form fitting companions to the harebell, which is so frequently seen in the wild glens of the western consts. The holly is of rare occurrence. The ivy and the beech we have never met with, and require better proof of their being natives than the circumstance of their having found a place in our Floras. Besides the above trees may be mention punce in our Floras. Besides the above trees may be mentioned many species of willow, few of which attain any magnitude:—the sloe tree, the wild cherry or gean, the hawthorn, the crab apple, and the white beam, together with the rare and beautiful dwarf birch, which occurs on some of the Highland mountains.—Edinburgh Literary Gazette.

PRESENT STATE OF SPAIN.

PRESENT STATE OF SPAIN.

It is not customary to publish any account of the robberies which occur almost daily. But to show their frequency and the boldness with which they are undertaken, it is enough to mention, that the diligence from Madrid to Barcelona, though escorted by several soldiers, was robbed at least ten times in the course of last year. The mail-coach from Madrid to Bayonne met with the same treatment either four or five times; the robbery being in more than one instance accompanied by the death or wounding of the postilions.

* * The state of society in Spain is such as fortunately cannot be matched in any other country, not even in Portugal or Tipperary. That there should, in a population of only 14,000,000, be, in the course of a single year, 1223 murders, and 1773 attempts at murder, accompanied by stabbing and wounding, exhibits a ferocity on the part of the government, without a parallel, we shall not say in the history of civilized nations, but even among savage hordes. The population of England and Wales differs very little from that of Spain; and during the years 1826 and 1827, there were 74 individuals, being at the rate of 37 each year, convicted of murder, and of attempts at murder by stabbing, shooting, poisoning, &c. Hence it results, that for every individual convicted of these crimes in this part of the British empire, there were eighty-one convicted in Spain! Such are the comparative fruits of good government and of tyranny and misrule. Surely if there be any truth in the remark of Hume, that, when human affairs are sunk to a point of depression, they naturally begin to ascend in an opposite direction, the regeneration of Spain cannot be far distant.—Foreign Quarterly Review, November 1829.

TO REMOVE A TIGHT STOPPER FROM A DECANTER.

It frequently happens that the stopper of a glass bottle or decanter becomes fixed in its place so firmly, that the exertion of force sufficient to withdraw it would endanger the vessel. In this case, if a cloth wetted with hot water be applied to the neck of the bottle, the glass will expand, and the neck will be enlarged, so as to allow the stopper to be easily withdrawn.—Cabinet Cyclopadia.

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